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THE PRINCIPLES OF PHOTOGRAPHIC PICTORIALISM

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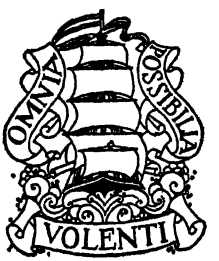
BY

F. C. TILNEY, F.R.P.S.

Author of

"The Appreciation of the Fine Arts," etc.



BOSTON

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Entered at Stationers Hall

Made and Printed in the United States of America
by the Plimpton Press · Norwood · Massachusetts

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THE PRINCIPLES OF PHOTOGRAPHIC PICTORIALISM

INTRODUCTION

THIS book is not for the beginner in photography but for the beginner in art. The technicalities of camera work are so fully and excellently dealt with in photographic publications that a book which attempts to cover similar ground has little reason for existence. But a book upon those elusive aspects of art which are essential to pictorial photography can hardly be inopportune, because, although art has fair place in the photographic press, it is there only by right of individual opinion, not with such authoritative finality as science can assume as a result of proof of *facts*. The facts of art are abstract. They are nothing more solid than mere appearances, and equally as elusive. They have their being only in feeling and emotion, and any fact that has its being anywhere else belongs not to art but to science.

Since we cannot, therefore, take art matters on authority — those who try to do so never can assimilate them — we must make them matters of conviction, and it is for this reason that there are no fixed standards in art, for feeling and emotion, which govern conviction, necessarily vary with the individual. And it comes to this, that the author of a book upon questions of art enters the lists, however crowded, quite legitimately armed with his personal opinions, for by virtue of them and what prowess he can show in their handling, he must stand or fall.

The chief aim of these pages is to remove some misconceptions from the minds of those who use the camera thoughtlessly and unprofitably; who imagine that pictorialism is a "highbrow" business with which they do not intend to be bothered.

It is profoundly regrettable that the millions who click little cameras all over the globe take no interest in the production of the image they have blindly caused to exist in the film. Between the pressing of the button and the first sight of a print there is a hiatus in which nothing of themselves appears, beyond perhaps a little mild expectancy. This kind of procedure is not photography at all, it is mere camera-handling. The true photographer's excitement, commencing at the exposure, remains latent but certain, like the image, until he feels the thrills of development. It continues through the printing, and survives in the enjoyment of the picture he has coaxed out, in accordance with his personal taste and judgment. To skip all this is to miss one of the rarest pleasures of life: that of creating something which shall win admiration and praise from cultured minds.

Intelligent and enthusiastic search for beauty in nature interpreted by beauty in art is perhaps the worthiest of all pastimes that are not of a strictly scientific character. There can be no doubt that in any creative medium it is the most efficient, lasting, and elevating form of culture. To this Parnassus the camera is a passport procurable by everyone. There are not a few who in the writer's experience have found art-nutriment enough in the serious practice of pictorial photography to enable them to blossom out into graphic art with the brush or the etching-needle. We are told that in the whole of America there are about six hundred really enthusiastic camera-picture makers out of millions who expose film. I should like to do something towards ever so small a readjustment of these proportions; for I am certain that pictorial photography may be practised as a branch of the fine arts, in spite of all that is said to the contrary by art-critics, who for the most

part are neither painters nor photographers. As a life-long painter, I assert this opinion with perfect conviction.

Photography in the hands of pictorial workers is a medium of response to stimuli exactly as painting is. It fosters the same ambitions, and is actuated by the same kind of inspiration. The only difference between the two is that photography avoids draughtsmanship. But design and tone are equally at the command of both; composition and chiaroscuro are essentials in each case; and the thousand other little qualities and concerns that appear during the making of a print are germane to those of the monochrome worker in the graphic arts. Prejudice against pictorial photography must be lived down; misunderstanding must be cleared up; and the only way these ends can be achieved is by winning more and more of the snap-shotting millions over to the side of the nature lovers. When love of the beautiful in nature (I do not mean the hustling observation of scenery show-places) begins to be an "urge," knowledge of beauty quickly follows, as knowledge inevitably follows love. With a knowledge of what beauty is and where it lurks, comes the power to use it in pictorial representation. These are easy steps in a sequence that is certain. The camera affords the simplest means of self-expression in this emotion of beauty-recognition in nature and art. Painting is different, because it demands creation from the outset, but photography comes with the drudgery done, the image formed, the shapes secured. All that part of art that makes the painter worthy — the feeling and emotion — is likewise waiting for expression by the photographer, who, though he must renounce the painter's glory of initial creation, with all that origination implies of scholarship, poetry, invention, fancy and skill, may yet feel the glow of satisfaction that self-expression evokes.

It is in this way that the practice of photography can minister to the culture of the millions in a way that the practice of painting never could. It is indeed a Promethean flame.

PART I

LESSONS FROM THE PAST

THE beginnings of photography were pictorial. Wedgwood's camera obscura experiments, Niépce's copies of engravings, Daguerre's portraits, together with Talbot's, Reade's and every other pioneer's first efforts, are evidence that the supreme quest was to find a way of making pictures of natural scenes and actual objects by means of the new and enthralling discovery. Not at all did these men dream that their labours would culminate in scientific achievements so utterly different from, and so vastly more important than, the pictures which were the acme of their hopes.

When at last it had been found possible to produce an image of something actually existing; an image that was clear, mirror-like, and possessed of certain traits that hitherto no painter had so perfectly seized; when, moreover, this image, after much endeavour, was successfully transferred to paper, and permanently, as it was hoped and believed; then the civilised world concluded that a new era in art had arrived—in *art,* be it marked, not in science. Here was "the real thing." What would become of painting now? Artists themselves began to quake, especially the portrait painters. Critics and connoisseurs were dazzled. Although stoutly maintaining the claims of paint-

ing in regard to sublimity and feeling, they had to admit that in exactness and in exhaustiveness of detail the painter was hopelessly surpassed. The arch-critic in art of these days was John Ruskin, and he at the outset became an enthusiastic photographer, illustrating his lectures and books by means of the new marvel. In "Modern Painters" he attempted to impugn the reputation of Canaletto and others by comparing their architectural paintings with his own daguerreotypes of the same subjects.

The evidence of these distant days shows proof that the devotees of photography were drawn and held by the exactness of its representation. And certainly it must have been a surprise which we, today, thoroughly inured to photographic effect as we are, cannot appreciate and with difficulty can imagine. So complete was the fascination of the newness of the truths presented for the first time to human eyes, that the victors in the flush of their triumphs were ready to break with the past of art and all its expressiveness, inventiveness, its fancy and allegory, and its stylistic traditions. We may account for this apostasy by the fact that, apart from drawn and painted representations, people had hitherto seen no reflection of natural images which endured longer than did the equally natural conditions that caused them. The old lens-projections, the mirror, the mirage, and still water, were not regarded as pictures, they were too transitory. It was Wedgwood's fervid hope to make permanent the images in the camera obscura. When the jubilant day came for a stable negative to be followed by a lasting positive, it is not to be wondered at that visual nature, pure and simple, literal, and inexhaustible in regard to detail, was hailed as the truest and loftiest field for art. Expressive interpretation was no longer wanted; by the light of the new truth it was held to be something false and freakish, derogatory to the magical accuracy that science had won from optics and chemistry. The art of the painter had been nature plus something else. The call was now for nature and nothing

else. Is it any wonder that so mighty an impetus as photography thus gave to literality has survived to this day; and that there are countless people who still maintain that its exact representativeness is the most admirable and only legitimate attribute of pictorial photography?

It was, of course, a pity about the poor artist, but who could help his troubles? The fittest must survive. The human equation in painting involved a departure from the "dead true." Photography could not lie! Truth was goodness. Beauty was both — and all the rest of it. So we had Mr. Ruskin demonstrating the pitiable wrongness of painting by means of his camera!

Ruskin's pedagogical exhortations for meticulous study of nature down to the minutest detail of plant-form, rock-form, and cloud-form were permeating the minds of all who concerned themselves with art directly or indirectly. Painstaking was being indicated as the supreme virtue — was it not the definition of genius? — and lo! here was a way to do in less than an hour what the worrying, fuming artist took days and weeks over! Moreover, the practice was open to all. Draughtsmanship being no longer an essential qualification, anyone might become a picture-maker. As the joyful ambition spread, the practice grew in popularity. Its appeal in portraiture was irresistible, and back-garden likeness-taking became just such a vogue as "snapshotting" is today.

But the comparative few who have guarded its birthright are justifying those significant beginnings day by day and demonstrating that there is an emotional side of photography as well as an intellectual. They have a hard fight, for the camera is, on such lines, its own worst enemy. The qualities that have made it indispensable in the advancement of science are precisely the qualities that have always fascinated, because they are extra-human. The camera has an eye which sees what the human eye can only see by means of added optical apparatus or by

piecemeal scrutiny. In the opinion of the good artist this is a fault, because an artist's work is answerable only to normal human standards; but the person who is not an artist delights in seeing in a print what he cannot see in nature; that is, a wealth of detail the existence of which he learns for the first time and enjoys as he enjoys the magic of the microscope and the telescope. This extra-human power, or the novelty of it, is at the root of all the fascination felt in photography by those who are not able to judge it by normal human standards. It is a state of things that has always existed; for, from the first, an amazing mass of detail has been the credential of camera-work. Records are made by the million today in the belief that photography has no other aim or use, and the proof of the record is held to lie in its exhaustiveness.

The next phase was inevitable. The more cultured began to harbour doubts, not of the efficiency of photography, but of the artistic satisfaction it offered. Literal transcripts began to lose caste, whilst a remembrance of ideas and ideals arose from the paintings of the past. The exact standing of photography became a little shifted from that of an all-sufficient end in itself to that of a means towards an end.

By the time that the "Photographic Society" was inaugurated in January, 1853, by men of science, artists, and amateurs, the conviction had become general that photography was really a handmaid to the arts. Sir Charles Eastlake, president of the Royal Academy, became also president of the new society, though he does not appear to have done much actual photography. Another distinguished artist, Sir William Newton, who was senior vice-president, gave, at the first meeting of the Photographic Society, an address comprehensively entitled, "Upon Photography in an artistic view and its relation to the Arts, with a view to establish that Photography can only be considered as a Science to those who investigate its properties, but that to the public its results, as depicting natural objects, ought to be in accordance (as far as possible) with the acknowledged principles of fine art."

From that day to this nobody has challenged the manifesto of that rather rambling title. More than half a century later another president, Mr. J. S. C. Mummery, referred to it as " the first and great pronouncement of our pictorial idea." Sir William's address reads as one by an artist for artists. Nowhere does it recommend photography for its own sake, but lays stress chiefly on the usefulness of the camera to the painter. The speaker exhibited a photographic specimen which showed the advantage of a rapidly taken scheme of light and shade in obviating the trial and error methods of the portrait-painter's studio; alternative schemes being as easily tested. One of the important points of the paper was the question of definition. Sir William said, " I do not consider it necessary that the whole of the subject should be what is called ' in focus '; on the contrary, I have found in many instances that the object it better obtained by the whole subject being a little out of focus, thereby giving a greater breadth of effect, and consequently more suggestive of the true character of Nature." So far was the supremacy of technical perfection from his mind that he proposed to counter the blank sky, then generally accepted, by the insertion of cloud forms dabbed on the back of the negative with Indian ink, or by local reduction of density. Further, he drew attention to the fact that photography had " not yet attained that degree of perfection so as to render faithfully the effect of colours and consequently of light and shade." It is worth remarking that in 1853 this enthusiast understood the proper relationship between colour-contrasts and tone values — a trifle serenely ignored today by many who in blind faith screen their colour-sensitive plates for all they are worth.

It cannot honestly be said that Sir William Newton's idea of the camera as a help to the artist was ever openly recognised. What actually happened was that artists availed themselves of its labour-saving and record-taking powers, but did so without boasting about it. Photography has been much used as a painter's " devil," or " ghost," mak-

ing it possible to do without hired assistance; but no painter has ever really improved his art by its means, and in that respect Sir Charles's hopes have not attained fruition. Herkomer was perfectly right in his cute paradox that " photography was of no use to any artist who could not do without it." In the early days the Scotsman, David Octavius Hill, being a painter, availed himself of the records he could get by the new process, which would cut out all the careful labour of making portrait studies for a large picture of divines in conclave on which he was engaged. His purpose was to copy his photographs into his pictures. It happened that he recorded " better than he knew." How far his portraits were regarded as works of art when they were made cannot be said, but they are now prized, though his great picture has gone into limbo. Plate 1 shows one of his portrait studies.

But early photographers were not all artists. Indeed the scientists were perhaps in the majority, for it was they who toiled to bring the process to perfection. It is on record that the difference of outlook between technician and artist caused a little rift within the lute even as early as the first meeting of the Photographic Society. In the course of development it was inevitable that technicians should urge their progression along industrial lines. Their aims were to evolve a process that would give all that it was possible not only to *see* but to *apprehend* in natural scenes, and to be able to duplicate and make permanent the record. This they achieved; but of the artistic and beautiful aspect of the things they recorded they of course took no heed. That they scented fortune is obvious from the avid efforts made by Fox Talbot and others to secure commercial advantage to themselves in patents. New discoveries germinated new trades, and these were readily capitalised and quickly developed.

The original dual interests of photography became thus one-sided; the incentives of science multiplying rapidly and the impulses of art remaining with but a few. But though small as a body, the picture-

makers developed great ideas, and some of them took themselves very seriously. These cultured few, though never losing their tight hold of the camera, turned their languishing eyes back towards the greater art. People of the degree of accomplishment that Mrs. Cameron displayed doubtless believed that they were following closely on the heels of Titian and Van Dyck.

Mrs. Cameron's work is bold with the bravery of the unsuspecting venturer. At first she could not, and later she would not, focus in accordance with the standards of the experts, to whom her handling of the lens was as disquieting as Phaeton's helplessness in the chariot of the sun. But she gained prestige with the untechnical, and her strong and virile likenesses of eminent men have been increasingly acclaimed as the years have passed. When, however, she attempted to force her portraits into a pictorial mould they surrendered virility, becoming tamed by the grouping and dressing-up necessary for the pictures. These compositions were inevitably redolent of the romantic sentiment then obsessing popular culture. Tennyson inspired her; but her angels remained human beings fitted with swans' wings; her cherubs were heads of children garnished by the poulterer. All this was a tendency which we today, looking back, must lament as the weakness of a really fine, free, and original photographic achievement misdirected by a not unworthy ambition. Mrs. Julia Cameron, who would rank with the painters, remained an excellent photographer (Plate 2).

A little before Mrs. Cameron's day the Swedish photographer, Rejlander, who was, I believe, primarily a painter, astonished the world with something that could only have been inspired by an ambition to rank with Tintoretto, Veronese, and Rubens. He produced a stupendous allegorical picture crowded with figures, calling it "The Two Ways of Life." It is the first composite photograph of which there is any record, and it dates from the year 1857. Measuring forty inches in length, it combines the result of about thirty negatives.

I must confess that when I first contemplated this colossal fatuity in the collection of the Royal Photographic Society, I was deeply stirred; not at the profundity of its aesthetic and literary content, but at the infantile presumption of the man. It was a thing both to admire and to deplore. To think that it was possible for a person with notions of art to sustain so tremendous an effort and to carry out in good faith and self-respect so exacting a task, oblivious of its almost insuperable difficulties, was to be left dumb with mixed emotions. Had Rejlander possessed the least scrap of a sense of humour, he must have slashed the thing to destruction at its earliest stages with a roar of Olympian laughter.

Mr. J. Dudley Johnston has very kindly made me a copy of this work, the original print of which is in the permanent collection of the Royal Photographic Society, and it is here reproduced. It represents a temple-like chamber crowded with figures. Two columns, one significantly vine-entwined, the other bare, flank an archway through which a vista is seen. From this portal into the temple issues a bearded man in a kind of toga. He conducts a maiden who seems drawn towards a group on the right hand side. On his right a youth strides towards an opposing and more numerous group on the left, made up chiefly of ladies, or as the phraseology of the day had it, of females; more or less unclad, especially less. These disport themselves in attitudes of idleness. Behind them are a few men and women who betray symptoms of haggling and despair. The other section of this community to which the pure maiden is inclined is indulging in a mental orgy of the arts, the sciences, and religion. Perhaps the high-water mark of banality is reached in the festoons of that copious upholstery of the day, so obviously the work of a trade expert, which eludes, by hiding them, the difficulties of the upper architecture.

The whole composition is on symmetrical lines, worked out with skill and ingenuity. In the centre of the foreground two of the half-

nudities are posed to present lines forming a concave-sided cone the apex of which is formed by the figure of the pedagogue who introduces youth and innocence to this startling and inexorable choice of alternatives. The design certainly suffers somewhat from the levelness of the floor space, for this necessarily keeps all the figures at practically an equal height in the lower half of the composition, whilst the upper half is mere wall and curtains. Everything is top lit.

As this was the first as well as the most egregious example of grandiose picture-making, it may well be discussed at some length, because it touches upon the more profound question of fitness in respect to photography as an art medium, and affords therefore an excellent object-lesson. The crowning absurdity of this production lay not in its conception and execution, but in the evidently honest conviction of its author that he was doing a fine thing (Plate 3).

That conviction shows the point which blind faith in photography as a means to art had already reached at so early a date. The argument was probably this. In pictorial art nothing is done without representing things animate and inanimate. The great masters drew as well as they were able. Photography can "draw" better than any human hand: the figures and objects in an allegorical composition must therefore carry firmer conviction if they are given with the realistic truth that photography secures. It is an argument that the ordinary intelligence would accept as sound — *prima facie;* but to look below the surface of it is to find it utter nonsense. Allegories, by their very nature, must deal with generalisations — in other words, with ideal, not real, presentments. They must be impersonal. In painted allegories such as Rejlander had in mind the objects depicted are offered as symbols.

All this is stultified by photography because, dealing as it does with particulars — a particular figure, a particular table — it does not give the generality, or ideal, of figure and table. Even if one could, by an

intellectual effort, lose sight of the commonplaceness, the sheer realism of the details in such photography as Rejlander's, and could thus regard the objects solely as symbols, there would still be difficulties in regard to that remoteness, intangibility, inconsequence — one might say that impossibility — which painted work assumes, but which ever eludes the photographic record of a concrete object. In Rejlander's work the particularisations of the commonplace bind us to earth. Everything is dated — to a lustrum. Everything asserts itself as it was before the camera — the tables and table-cloths — the "robes," the beards, the very wood-turnery and little shadows. Suggestion? There is none: the whole composition is an inventory of Victorian trifles. It is all elaborate *tableaux vivants*. Think of the great allegorical pictures of which this work is an emulation! Remember the bigness and shadowiness of Renaissance painting which keeps familiarity at a distance and talks to us in terms of the eternal and unearthly! These works are sublime even when, as in the case of Tintoretto, there is indeed a kind of exalted realism in their depiction. Poor Rejlander! Yet he was not alone in his misapprehensions, for it is said that "The Two Ways" made a great stir and set other photographers aiming at similar indiscretions.

Some of the failure of this production is probably due to the mixing up of moralising with every day visuality. Had its author taken a less lofty line and made not a homily but something in the nature of a reflection of one only of life's emotions, he would have had a theme fit for more simple treatment. F. Benedict Herzog did this with considerable success; but that was half a century later, when the work of the pioneer Rejlander was a lamp unto his feet to show the pitfalls. Herzog was not far behind in ingenuity and elaboration, but he had wisdom enough to put his figures in an environment and relationship safely removed from the ordinary and matter of fact *mise-en-scène* which Rejlander adopted; and by means of good linear design he

evolved striking pictures in which the commonplaces of actuality were skilfully avoided (Plate 3).

This is not a history of pictorial photography and there is no need for elaborate comment upon the works of the past; but it is salutary to regard certain outstanding phases of development and to note their effect upon the art. We can learn valuable lessons in this way. For example, the case of Rejlander not only shows that enthusiasm and application will not of themselves bring an admirable result; it shows also that the limitations of photography are not confined to technical matters. There are, demonstrably, certain manifestations of art that photography is as unfitted for as a mole is for tree-tops. If, as in the case of Herzog, some nearer approach is made to a fitness of treatment to subject, the business still has much of the *tour de force* in it. Labour, contrivance, struggle against odds, are still the most lasting impressions on the spectator's mind, however much he may find that is admirable; and, on the whole, Herzog's high-art aestheticism rings as false as does Rejlander's didactic literalism.

Photography was much more itself in the hands of H. P. Robinson, who also made pictures by the co-operation of several negatives. It is to be noted that this method of combination printing was adopted by each of the aforenamed men in their common wish to produce important figure-subject pictures which should resemble, if not challenge, the paintings that were their prototypes.

The first aimed at the great Italians, Robinson aimed at the Dutch and German genre painters, and Herzog at the English romantic manner that went by the name of the "aesthetic style" in the days of Victoria and Edward VII.

There are some who hold that the combination method is in itself a confession of executive weakness, since the result is not absolutely photographic but one that has involved the scheming and arrangement of photographic units. If there is anything in this objection, then the

reconstructions of Dutch genre pictures by Richard Polak must stand higher than the works of Robinson, for they are the results of but one negative. Robinson's work, however, was fully justified by the great favour it won from the public. He, no more than the other combination printers, spared pains, but his indefatigability did not emerge as something painful in the final outcome. His elaborate background-building, model-training and accessory-furnishing all helped towards artistic harmony. In his interiors he usually managed light and shade with breadth and good pictorial effect, so that there was little or nothing of the pieced-up-bits impression as there was in " The Two Ways of Life," which is quite without effect. In outdoor views Robinson managed with equal skill to get the *oneness* of the landscape setting (Plate 4).

The works of Richard Polak were the last of the more serious attempts in figure pictures. They date from quite recent years. There was in them the additional flavour of connoisseurship, revealing an enthusiastic and sympathetic study of the best of the seventeenth century Dutch painters — Metsu and Vermeer in particular. These works were not only true to the period in the matter of costumes and accessories, but reproduced to the full the charm of opulent domesticity, the humour, and feeling of the prototypes. Technically the photographs were above reproach; artistically they were delightful. With a less liberal output Guido Rey also demonstrated the charm that the photographer can seize in the painter's kind of picture with the help of an appropriate setting, correct costume, and capable models (Plates 5 and 6).

This phase of pictorial photography gives proof of a laudable ambition to use photography exactly as professional artists use their mediums; but it implies a notion that the only necessity is to secure models and arrange a *mise-en-scène* in completeness, and that photography will do all the rest. So it may, in superlatively expert hands; but even in these rare cases it remains a trend that must inevitably keep

photography down and under as a new and direct art medium. It will never raise camera-work, though it may now and again pitchfork it on to the figure-painter's level, there to appear a questionable alien in the eyes of the painter.

There is no stronger evidence than the practice of combination-printing affords of this desire to produce what I may be allowed to call painters' pictures, because its separate exposures are only a means to a more supreme end. It has almost ceased to be fashionable today, but its influence on ideas in pictorial photography has been for the most part exalting.

After Robinson came Horsley Hinton and Alexander Keighley, both of whom were still animated by the idea of the fine *picture* rather than the fine *photograph*. They both used several negatives in arriving at their final print, but they came a little more into intimacy with Nature than did Robinson, and left Rejlander quite alone on his peak of lofty allegory. Hinton was positively indifferent to what is today valued by some as technical perfection. He was heart and soul a picture-maker, more by inspiration from art than from nature. To my mind his work was always rather extravagant and his effects not a little cheap; but their influence was distinctly bracing. He woke up the pictorial ranks by hammering with a Thor hammer on their dormitory doors. It was impossible not to see what pictorialism meant when he exhibited his striking and fearless works. Keighley's spirit was of a finer essence. He is, happily, still with us, and I cannot speak of him without a little risk to the proprieties. A contemporary of Hinton, he affected photography in a different way. Not limiting himself to the pictorial " bag of tricks " — contrasts of gloom and gleam and other excitements of weather characteristics — he sought a profounder romanticism in the mighty lines of wild places and in striking arrangements of imposing objects. Like Hinton, he saw no great virtue in the smaller criteria of perfection in technique, though his

technique was efficient for his needs. Often the obvious hand work on his large prints brought disparagement from those to whom there was nothing else in evidence; yet his influence on pictorial photography has been as great as anybody's and consistently elevating; for Keighley sought, and seeks, the inspiration of the literary content of nature, not the successes of a specious artistry. His later work, by being more direct and derived from single negatives, has brought his high endeavour on to the footing of present-day practice (Plates 7 and 8).

So much recently has been written and done in the interests of photographic technique that its claims and demands have been much strengthened, and it is to be doubted whether a photograph so obviously worked-up from the exposure stage onward as were the triumphs of old, would today pass a board of judges at a first-class exhibition.

This executive improvement has resulted in a particularly distinctive character of British work, which is that it still aims at a fine picture on painters' lines, but does so by direct means straight from nature to the print; whilst in the making of the print the photographer gives himself full scope by every means of control that will be a resource in the attainment of his ends. There is a technique of this control, whether it be in gum-bichromate, oil, bromoil, carbro, or any other amenable method; and this technique has its own school of research, and its own literature. As it progresses and becomes formalised, it grows more akin to "straight" photography, whilst the technically perfect print assumes on its part those subtler pictorial values that were once deemed to be alien to it.

A continuous output of excellent pictures artistically contrived and skilfully manipulated is the leading sign of the times. Such work comes from persons having respect for pictorial tradition, contracted either through professional art-training or by artistic development as amateurs by the study of literature and cultural courses in art. The

names of J. M. Whitehead, Bertram Cox, Fred Judge, W. J. Roberts, Herbert Bairstow, Murry Barford, to mention no others, stand for the high grade of work by the control processes; whilst the stricter photographic methods are typified in such work as that by Charles Job and J. McKissack.

The highest achievements in American pictorial photography are enshrined in the volumes of " Camera Work," a sumptuous magazine, now discontinued, which was produced by Alfred Stieglitz at the beginning of the century. There, presented with every advantage that expense could secure, examples can be seen of the work done by the leading pictorialists of America (and a few Europeans) during a number of years. This collection is representative of the scope and variety in American work, in which fancy and allegory take a share. Of the latter, Gertrude Käsebier furnishes an example in her highly original if at first elusive " Blessed Art Thou Among Women." Mrs. Käsebier filled much the same position in American work as Mrs. G. A. Barton did in England (Plate 14).

The powerful portrait of Lenbach, the German painter, at once gives the measure of American portraiture and of the masterly skill and insight of its author, Eduard J. Steichen (Plate 15). " The Bridge, London " is representative of the architectural work of Alvin Langdon Coburn, who is also well known for his portraiture. His work in both lines has been published in several volumes, all now out of print and sought by collectors.

Perhaps the chief characteristic of American outdoor photography is its recognition of aesthetic interest in the phenomena of light and shade and of pattern. It deals with these for their own sakes. The cities and their architecture furnish material to this end. Plates 17 and 18 are typical of this class of work. " The Spirit of Commerce," by John W. Sheeres, though little more than a record, is obviously meant to impress the mind with the mighty significance of the things it por-

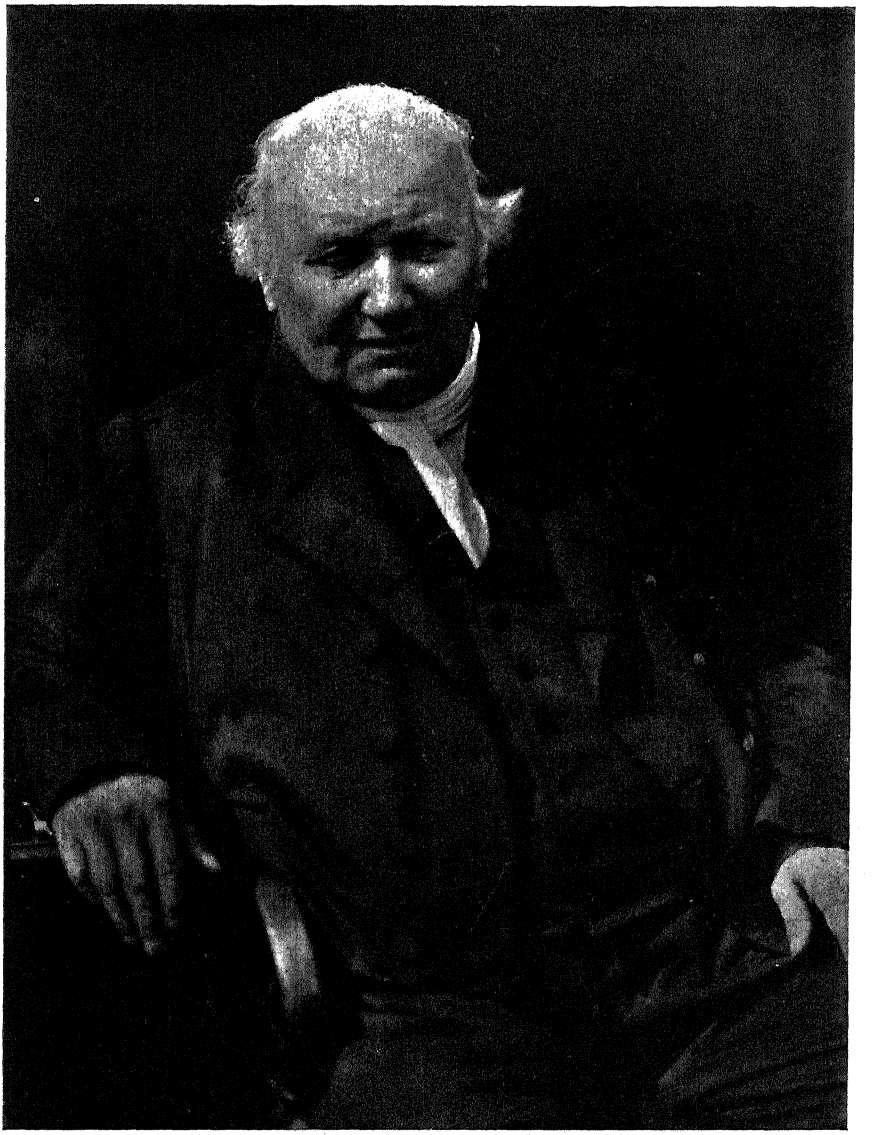
trays, ordinary as they may be. J. Vanderpant, in " Castles of Commerce," attacks another aspect of the same idea in emphasising the poetic element in the industrial structures he depicts.

In pictures like these, though they sometimes represent what to the European mind are unlovely objects in themselves, there is usually a feeling for the inexpressible majesty and romance which otherwise ugly objects hold for the mind responsive to such stimuli. Moreover, this feeling is nowhere more surely than in America accompanied by plentiful evidence of unexceptionable technical performance. Control, as yet, is not widely practiced but is gaining ground. Here, also, it must be noted that the cinema has provided incentive for much literary interest in American pictures, made possible by the throwing together of photographers and the actors and actresses concerned, as well as the usual *entourage* of the film studio.

The British School seems to have struck root in Australasia, where remarkable progress has been seen during the last decade. A band of enthusiasts in Sydney is particularly energetic, holding its yearly " Salon " and issuing its illustrated " Annual."

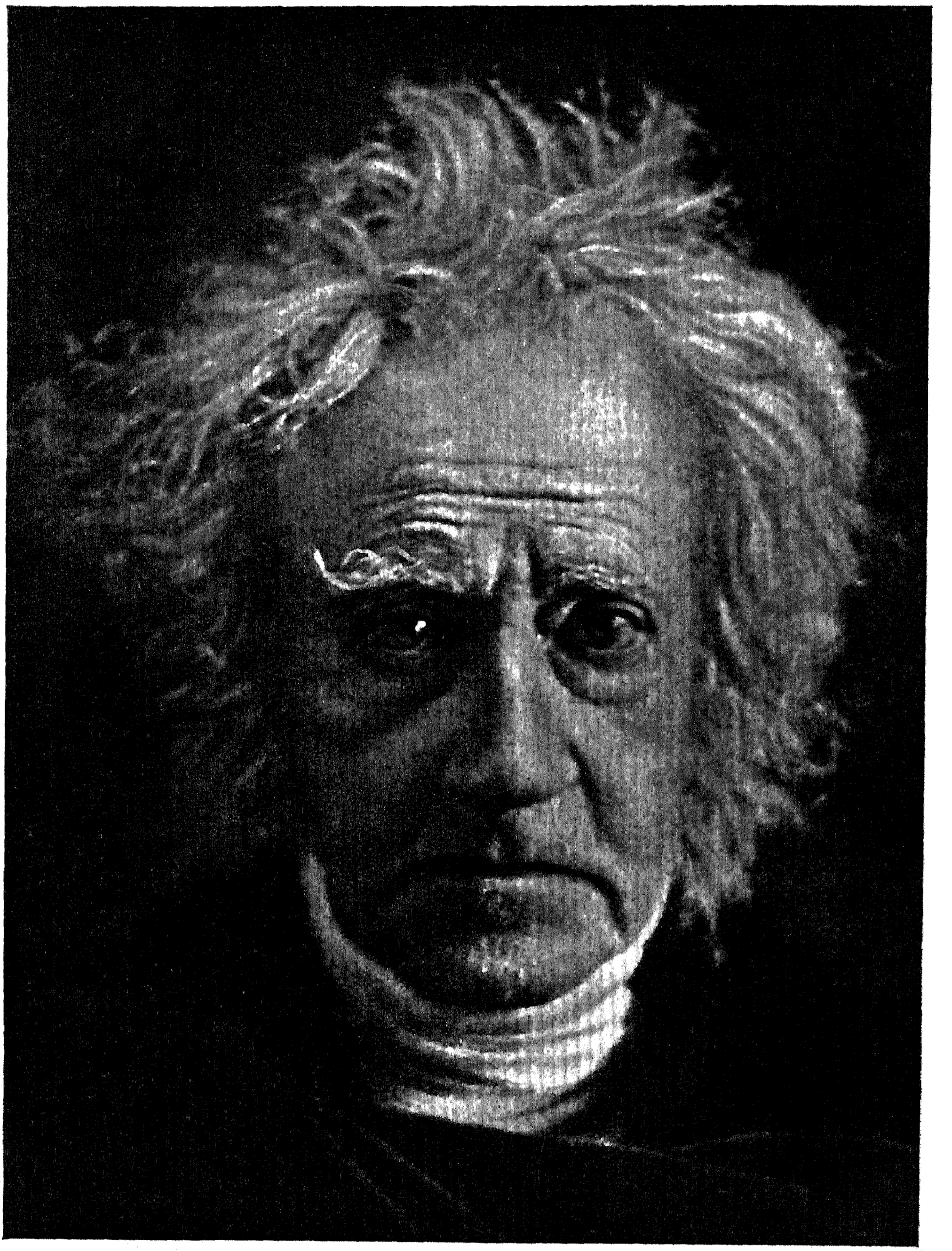
The Japanese are of all the nations of the Orient the most enthusiastic photographers. It is a fact at once the most surprising and yet the most to be expected. For nothing can be imagined further from the traditional art of Japan, steeped in convention as it is, than the uncompromising realism of the photograph. Yet it must be this very characteristic that attracts the modern Japanese, who thirsts for the particular variety of western advancement that is the most western and the most advanced. He is certainly " up-to-date " in his equipment: can he ever become " up-to " the west in his outlook on art; and is it desirable that he should? He has relinquished an art that is unique in the world; but his treatment of photography reveals traditions of a culture that are too strong to be relinquished.

It is true that there are a few Japanese photographers who have for

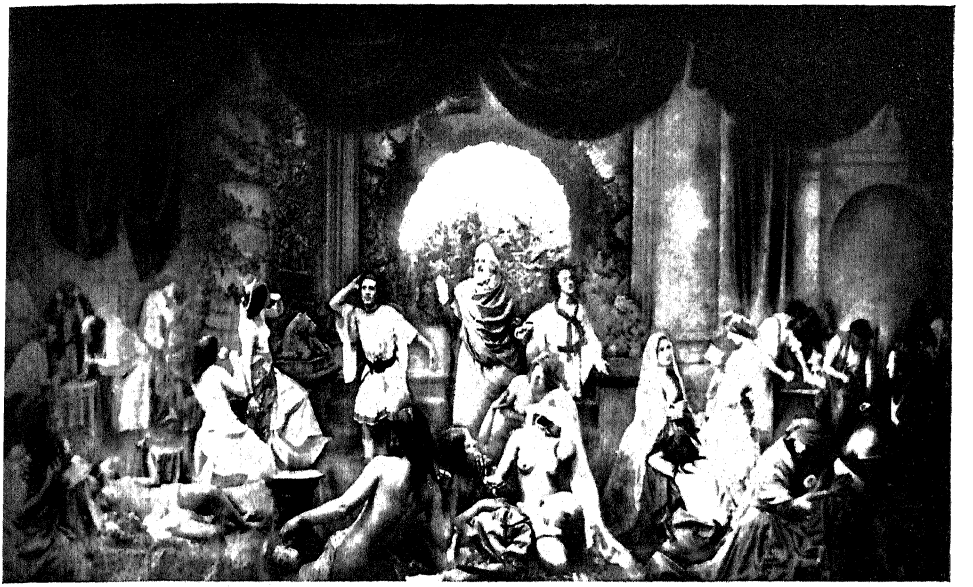


PRINCIPAL HALDANE D. O. Hill

PLATE 2



HERSCHEL — Julia Margaret Cameron



THE TWO WAYS OF LIFE — O. G. Rejlander

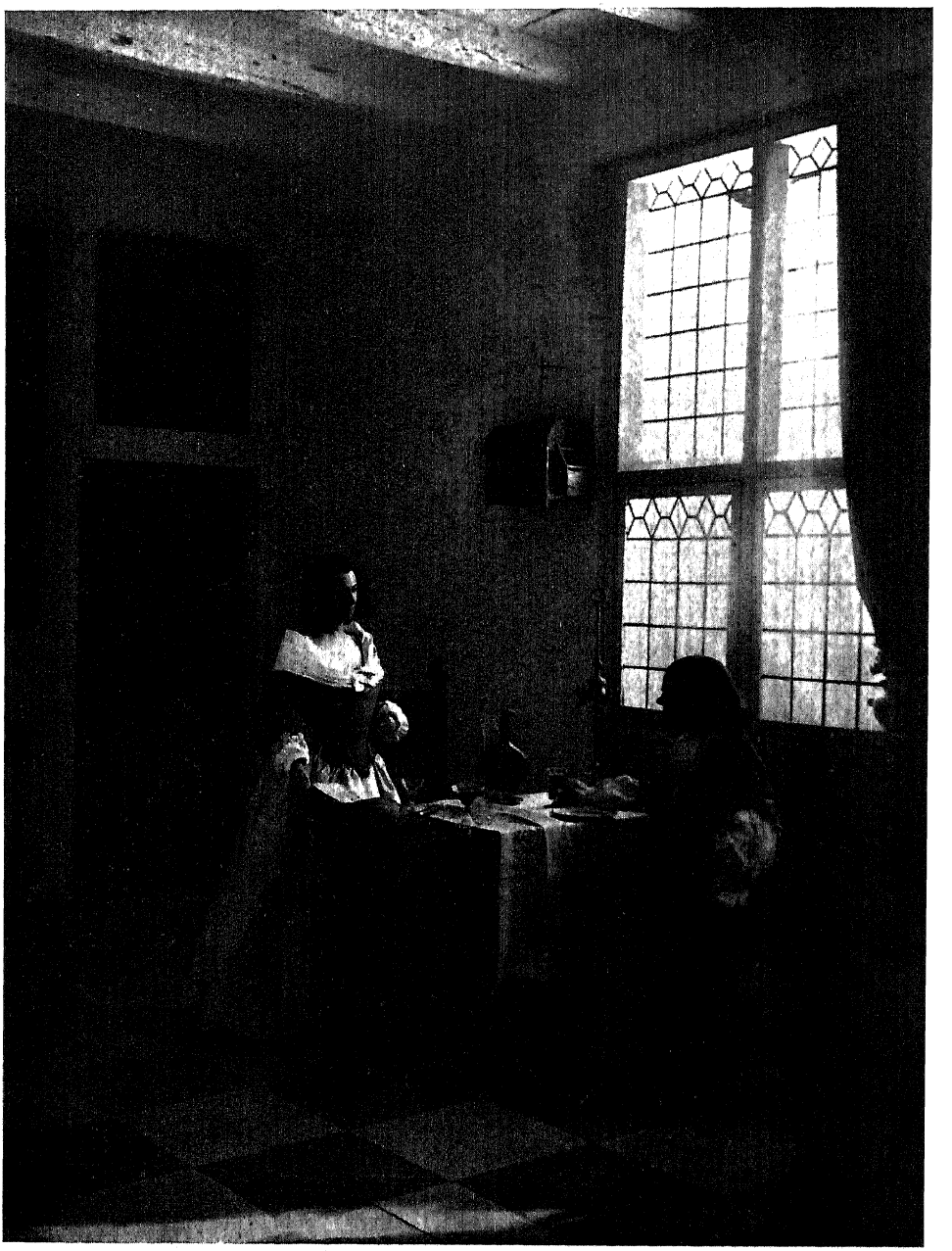
THE BANKS OF LETHE — F. Benedict Herzog

PLATE 4

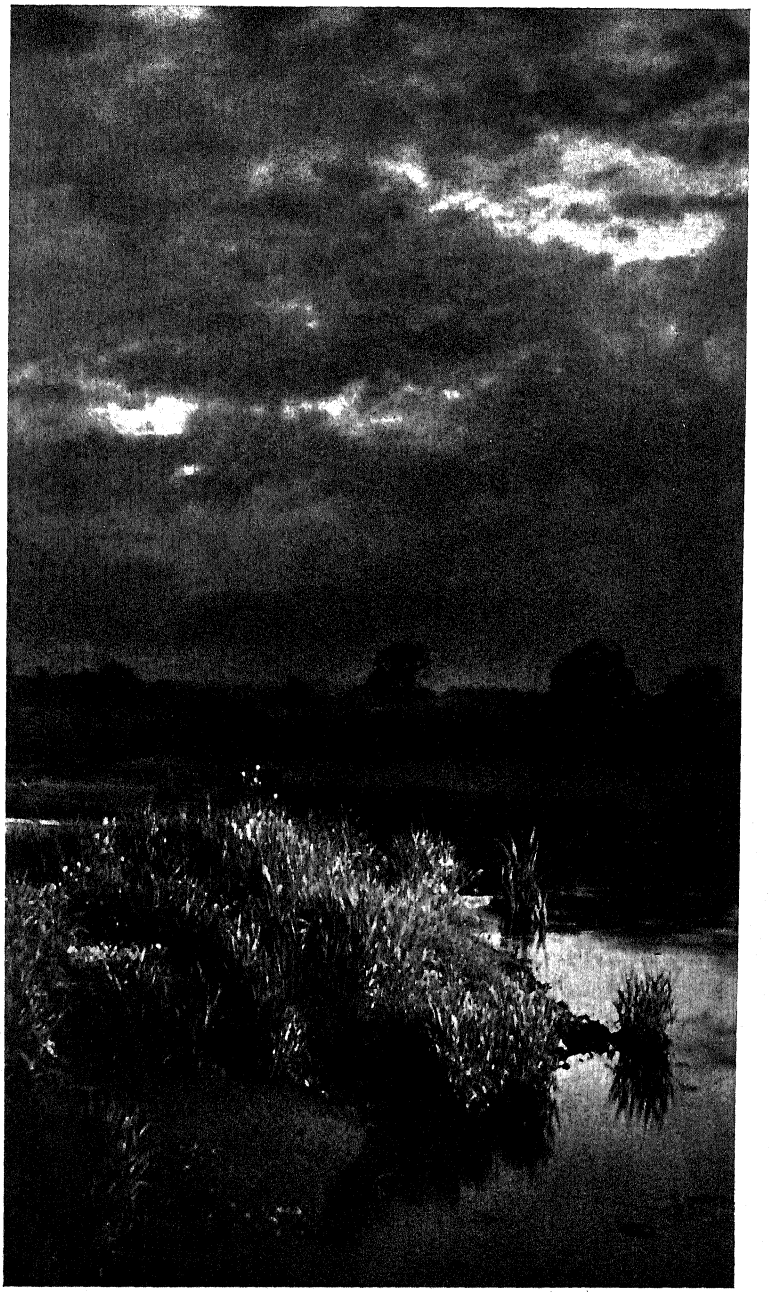
DAWN AND SUNSET — H. P. Robinson

WHO IS IT? Richard Polak

PLATE 6



A Flemish Interior — Guido Rey



DAY'S DECLINE — A. Horsley Hinton

A Greek Temple

Alexander Keighley

professional ends adopted portraiture of western people; but the bulk of the work done in Japan and in Seattle is decorative, slight, fanciful, and, as far as photography is concerned, strangely new: — the shadow of a hanging spray; a surf line on a shore, not given as landscape but as all-over design; the broken reflection of sky in a small area of water, — these prove theme enough (Plate 19).

To the Occidental such motives, so slender in their purport, scarcely seem worth more effort than a passing thought; but the industrious Japanese artist devotes to them all the pains and time that would be considered by us as due for the production of an important landscape: proof that he regards his photography with the respect and treats it with the devotion that his ancestors had for brush-drawing and block-printing. It is proof too that in spite of modern methods he remains the same gentle artist of the "pretty." Fortunately we have no evidence of that more ancient tradition of the horrible which underlies Japanese culture. The camera spares us that.

The adoption by Japan of photography as an art is an epoch-making occurrence, and in that country itself must be vastly revolutionary within the scope of the older art which never permitted the representation of a woman's face but as a mask. Amongst Americans there appear, here and there, slight signs of the Japanese influence. Doubtless those who adopt latter-day ideas of general subversion find a sort of fascinating newness in the Japanese difference of outlook.

Writing, as I am, in England, in the midst of the older traditions of photography which, as I have shown, were derived from those of European painting, I cannot with knowledge nor with propriety say much upon the shorter traditions of another country; but I am disposed to believe that it is futile to expect that a camera can be the occasion of an art-renaissance, as has been claimed. If new subject-matter is found in camera records, it is obviously not by any virtue of the camera but by the unconsidered exposures which the holder of the camera

makes. Wherever we may be it is the man behind the camera who is responsible for the selection of the subject.

The matter is thus resolved into a simple question of whether or not the traditions of artistic picture-making, which have had the confirmation of centuries, are to be preferred to the capricious exposures made by those who are opposed to or careless of such traditions.

I take my stand upon the works of the past, feeling devoutly that there is far more in the art of the past that has not been surpassed than there is of latter-day transcendence. It cannot be right to maintain that there is an art of the past which is obsolete and an art of the present which is valid. There is only one "Art": it is "universal"; it was, and is still and must always be. To think that the camera can create a new art for itself is an error of reason. It may and does create a new style of picture; but what is truly entitled to be called art in such new style exactly comprises what always has been called art from time immemorial. People who live solely in the present have naturally little understanding of what the past holds. Those who study the past know more and more as their studies deepen that the old thought was equally as "good, true, and beautiful" as modern thought. Art is but a response to inspiration: it has nothing whatever to do with advances in science, with changes in moral code, or manner of life. These circumstances do but present new aspects of everlasting things to the mind. And our minds are not a whit more perspicuous, more responsive, or more creative than the minds of the philosophers and artists of ancient times. It is, therefore, futile to say that the old artists are useless exemplars for the camera; or that "Velasquez would have made a better portrait of Philip IV with a camera," which was the nonsense of a playwright speaking of what he appears not to have understood.

These considerations must of necessity prompt me in offering anything that I can say regarding the making of pictures; for I hold that tradition is the cumulative survival of the best and finest. We can add

to it by modern endeavour, and so swell its prestige, but it is childish to cut adrift from it. Those who have gone before us have ransacked every emotion to get the rarest and truest response that art can make to nature, and from this exhaustive search have resulted all the basic principles of the artist's product. The camera has revealed to us further beauties which the artists of old would have been glad to see, but it cannot possibly subvert any basic principle. If we attempt to make pictures by means of the camera they can only win the approbation of cultured minds when they make a direct appeal to those instinctive preferences which are the touchstone of all manifestations of art.

PART II

PERENNIAL PRACTICE

SOME DEFINITIONS

ART criticism, throughout the centuries, has been faced with certain principles resulting from the artist's effort to depict natural facts and to secure pictorial beauties. These principles are recurrent in all styles: they are not restricted to period or manner or subject. They are not man-made, but an inevitable result of elemental causes, and they therefore form a kind of essential framework for any sort of picture. Naturally enough they are universally recognised by distinct names, many of which, such as " contrast," " simplicity," are self-explanatory in whatever language they occur. But even these terms have in art a somewhat different application to that which belongs to them in ordinary parlance. There are others having an exclusively technical application — " vertical planes," for example — and these, at any rate, are not readily explained by common experience.

In so far as a photographer is consciously and deliberately a picture-maker his work can only proceed by an observance of these principles. They will furnish the sole outward sign of his pictorial feeling and deliberation; and by them, and them alone, will art-criticism recognise his photograph as a picture having claims to art.

It is, therefore, necessary that the photographer should know the names by which these principles are distinguished. He may be perfectly conscious of the workings and effects of some of them, and yet not know their standing in art-criticism. Indeed this is usually so in the case of people with artistic feeling who have never stepped into the domain and atmosphere of practical art and its technical problems. If the chief technical terms used in monochrome art are not understood by the student, it will be difficult for him to pursue any argument or discussion of these matters. This need is the pretext for inserting at this stage a glossary of technical terms. Some of them will be found more fully treated in other chapters; but for the sake of completeness and convenience they also are included here.

With one exception the list includes no photographically technical terms, because this book does not deal with photographic technics. The exception is made in the case of the word "halation" which is intimately concerned with a legitimate pictorial effect.

AERIAL PERSPECTIVE: The sense of distance given by the atmosphere that veils the distinctness of objects, lightening their dark parts and dulling their bright parts. It increases in the ratio of distance from the spectator's eye.

It is also the cause of a change of colour in objects, which, whatever their actual tints, become greyer by reason of the screen of atmosphere before them. This greyness graduates into blue in certain weather conditions as the remoteness of the distance increases; see "vertical planes."

BALANCE: The compensation afforded by an object or "incident" (at a part of the picture that is otherwise unfilled) as a "set-off" or response to the important mass in the design when that occurs at one side of the picture.

BREADTH: A term very widely applied, but chiefly signifying a way of seeing and representing passages in natural views in a manner that merges detail into the general tone or colour.

CHIAROSCURO: The Italian words *chiaro* = light, and *oscuro* = dark; pronounced k'yar'os'koo'ro. The term is applied to works in which the light and dark tones have been schemed to make effective design. The word is not, as commonly supposed, exclusively a synonym for "light and shade," the school process of model-drawing.

COMPENSATION: A word sometimes used in preference to "balance"; see above.

CONTOUR: The containing outer surface of things. In two-dimensional art the word is usually applied to the boundaries of an object such as are commonly known as outlines; but the two things are not the same, since "outline" may be legitimately used for the edges of a silhouette, whilst "contour" implies what is seen in the foreshortened view of a moulded plane. Thus more is expressed by the phrase "contour of an arm or face" than would be by the phrase "outline of an arm or face."

CONTRAST: In art this word is mainly used for opposition of colour and of light and dark tone; but it can, of course, apply also by its more general connotation to any aspect of a work of art.

COOL COLOUR: Hues which approximate to the blue portion of the colour scale. The term is probably derived, by association of idea, from water, ice, snow, distance, and stands as the opposite of yellows and reds of sun and fire.

DEPTH: The distance, or depth of a view, represented.

The measure of tone-intensity and of colour-shade or colour saturation.

The third dimension.

DETAIL: In photography, the distinctness of extremely small form and modelling in all parts, and particularly in shadows.

DIAGONAL: In composition, the leaning over of upright forms. Any feature lying in a direction between the vertical and the horizontal, that by its importance gives a special character to the design of a picture. Strictly, the word means across from corner to corner.

FLAT: In art-technics this term almost exclusively means plain, even, unmodulated. A flat tint is one without variety of gradation.

In technical photography, the word is used to denote a print in which contrast is insufficient.

" The flat " is also a term signifying a two- dimensional representation, as opposed to " the round " which implies the three dimensions of the sculptor's art.

GENERALISATION: The opposite of particularisation. A synthetical way of seeing contours, shapes, and tones, in which the minor variations, discoverable by an analytical scrutiny, are fused into a general result. Thus the human form is represented in Egyptian art by long clean contours that give the first essentials of line. The ideal types of ancient Greek sculpture were likewise generalisations.

GRADATION: The gradual and " continuous " lightening and darkening of tone and color, either by attenuation of illumination, or by merging of tints and tones in material.

GRADUATION: The increase or decrease of any material quantity, or of visual effect, by degrees, steps, or stages.

The marks on a graduated scale or measure.

GRANULATION: In art, the gritty or crumbly texture of tones due to reticulation of the medium, to grains in pigment, or to roughness of the " ground " or " base "; i.e. the paper, canvas, and so forth.

Granulation is often sought for and deliberately arrived at, for its peculiar virile quality.

HALATION: In photography, the " halo " which is formed in the negative around points or passages of brilliance. It is diffused among the silver bromide grains of the emulsion (when its name is changed to " irradiation ") and reflected from the back of the glass or film; all of which means disproportionate density at development.

HORIZON: The apparent line of meeting for the sky and earth: not to be confused with the sky-line, which see.

IRRADIATION: The effulgence observable as coming from any luminary or from any point or passage of light. It partly hides whatever is adjacent to the light-emitting object, and in painting is recognised as the sole characteristic by which effulgence can be convincingly depicted. In photography this beautiful phenomenon is often avoided, by means of various tricks and resources, because it is believed by photographers to be solely the fault known as halation. They apply the term " irradiation " to halation in an emulsion.

INCIDENT: As a noun, not an adverb, this word indicates an accessory, an interruption, or an accent, occurring as a noticeable feature in a picture, or in any line, any passage of tone or of colour, in a picture.

KEY: As in music a melody may be pitched in any key, so in representative art the tonal relationships may be in any key without sacrificing truth of effect. The key may be pitched in any section of the scale of tone.

LINE: Besides the common application, this word signifies, in art, an alignment of objects and parts. As such alignment is necessary to the designer, " composition of line " is one of his chief resources.

LINEAR PERSPECTIVE: See " Perspective."

LOCAL COLOUR: The accredited general colour of anything as opposed to its true tints discernible by analytical scrutiny — in fact, a popular or conventional synthetical generalisation, as " green grass," " red coat." Since light, direct and reflected, accounts for the colour of all things it is doubtful whether such a thing as local colour actually exists: but it is a useful figment to preserve and is well understood.

LUMINOSITY: In art, the quality of looking as though emitting light. The word is chiefly applied to skies, but luminaries of all kinds should naturally show the same quality.

In photography the term is sometimes used to indicate the brilliancy of a given tone, and luminosities are therefore measured and graded.

MEDIUM: The material in which an artist works.

MODELLING: The surface variations of objects. In sculpture " modelling " gives its name as a technical term to the process of imitating a natural object in a plastic material, as distinct from carving. In the graphic arts, modelling has to be expressed by light and shade.

Thus the sculptor models to produce light and shade: the painter and photographer use light and shade to suggest modelling.

OUTLINE: The conventional boundaries of two-dimensional images of things. Natural objects are also loosely said to have outlines when viewed by the eye — which is, of course, a figure of speech.

PATTERN: The dominant shape resulting from a scheme of chiaroscuro or contrast of lights and darks in a picture.

PERSPECTIVE: The conventional method of depicting three-dimensional views and objects on a flat surface — a so-called science in the case of "linear perspective," but an art in the case of "aerial perspective."

PLANES: The level superficies of objects, as for example the six sides of a box; the facets of a brilliant. Also the approximately flat or level passages in any object, as for example, the cheeks of a man's face; areas in the sides of a vessel.

The "picture plane" is a postulated position in space at which the parts of a picture would coincide with those of the actual objects it imitates, if viewed from a certain standpoint.

See also "Vertical planes."

QUALITY: In art this word means a multitude of things too numerous to particularise. It may be said to signify always, some general appearance of richness or fascination in the material and also in the method of the representation. It has nothing to do with exactness of fact but is limited to appearances — in the actual view as well as in the representation.

RADIATION: The disposition of radial phenomena as in the rays of the sun, the spokes of a wheel, the triangles of the conventional star-

symbol. By perspective, parallel lines of objects appear to converge and diverge; thus the structural lines of streets, of roads, rails, etc., appear to radiate. This appearance is of the utmost value to the picture-maker, since the converging lines lead to " points," imaginary or otherwise. When such lines are curved as in the folds of drapery, from points of support or attachment, they afford systems of lines that contribute to the beauty of design.

The " form " of radiation emphasises a " content " of expansion valuable in the representation of dispersive force.

RECESSION: A term applied to the appearance of proper distance of things one behind the other. " Recession of planes " is the usual phrase. It applies more particularly to aerial than to linear perspective, and has special reference to the representation of more and more atmosphere before the different vertical planes as they recede one behind the other into the distance.

ROUNDNESS: The quality of solidity in the representation of three-dimensional things. A badly depicted head, for example, may lack " roundness," as the term goes.

SCALE: The gamut of tones from white to black.

The size of one object in a picture compared with the size of another object of the same kind in another part.

SILHOUETTE: An object or group of objects seen as a flat mass without detail. The name is that of the inventor of portraits cut out of black paper with the scissors.

SKY-LINE: The contour or edge of terrestrial objects in a view as they appear against the sky: not to be confused with the horizon.

TONE: The degree of non-luminosity of objects. Also the measure of depth of tint in pigment or stain in the medium used by graphic artists and photographers. Tone is a term also applied generally to the lightness or darkness of a picture or its parts, whether from depth of colour or from the predominance of shaded parts in the representation.

VALUES: The relative strengths of luminosity and of tone of objects. Values have nothing to do with actual strengths of tone by measurement. They are strictly the comparative justness of a pictorial rendering of tones in nature.

VERTICAL PLANE: The imaginary plane in space at which all objects at an equal distance from the spectator would occur. Such planes are more an accepted convention than actual truth, because equal distances measured upon the ground from the spectator must necessarily occur on the line of a circle; but the proportional narrowness of the segment of such a circle, and the conventions of " plane perspective " make it possible to consider vertical planes as parallel to the base line of the picture plane; see above.

WARM COLOUR: Hues which approximate to the orange part of the colour scale. The term is probably derived from the yellow and red of sun and fire by association of idea.

WEIGHT: Signifies the degree of importance of an " incident " in a composition. It is chiefly due to strength of tone, but the term also implies the psychological importance that comes of force in the detailed representation of any incident.

THE SUBJECT

THE beginner enjoys a fine care-free way of selecting his subjects, especially if he neither knows nor wishes to know anything about pictorial principles. He fires at anything that has the least modicum of what he regards as interest. For example, if in a row of houses which are as like as peas there happens to be one that has been altered to make it different, the " snap-shotter " lets fly at it. His children anywhere and at any time are of course very eligible quarry; so is his friend in the garden, his wife at the sea-side, a dead donkey, a particularly ugly railway bridge, the reflections of things in water, and the front-door of the hotel. The only care he need exercise is that of getting the object well on the plate or film. His camera is fool-proof and the retailing chemist gets all the real work done. How long the fun of this sort of thing will last is a question; but it could not be for more than a very few months with any man of ordinary intelligence, for he must be bored to see the results of such efforts more than once; and as for putting them in an album — well, that is a good plan if the album is put where it will be forgotten.

The method of the wiser man, who boasts that he only takes things which he is anxious to record — the Alps, the Rockies, St. Paul's, the Sphinx — is to confine the selection strictly to the recorded object. But alas! do we not all know the big hats and heads, the nebulous motors, the posts, signs, and dancing pedestrians that add their quota to the sum of interest? In hand-camera prints cherished as " scalps," it is only by pure accident that a still further kind of interest appears, namely that of the picture as a whole apart from subject-matter and

associations. If it should happen that one print out of a long series is able to call forth exclamations of pleasure from those who are not directly interested in the recorded object or in the friends and relatives that grace the background or the foreground, then it is clear that something occurred at the taking of the photograph of which the taker himself was unaware, and for which he cannot justly claim credit. He values the print, nevertheless, more highly than the others which have drawn no response, and possibly he would single it out for rescue if the whole collection were threatened with destruction. And here we touch the spot. The fact that a photographer can, either by his own conviction or by the authority of others, prefer one print among others on account of some consideration quite apart from its recording value and associations, is proof that there is something in that kind of photography that is called "pictorial," even when it comes by accident.

Would not any man like to get such preferable things every time? And would he not be extra pleased if he could get them by his own will and not by accident? And would not photography be to him in such conditions a far more absorbing, more pleasurable, and more lasting thing than it could be by the way that pleases nobody?

The reason why thousands of miles of film and plate are used up on worthless rubbish is simply this: the average man has it firmly fixed in his mind that photography exists for taking likenesses. Legitimately, so he believes, the likenesses are of people (for photography in the layman's mind is associated with the family album and the professional's show-case), but as the camera is now a fashionable toy, amateurs of course take likenesses also, and views of places, too. This little thought-process is answerable for the idea that the camera is exclusively a recording instrument. Nothing else records so well. Photography far surpasses in accuracy and speed the artist's sketch — so the assumptions go. The sketch, of course, is pretty sometimes, but it

is no more useful on that account, perhaps less so. In short photography gives the truth — all of it.

With such notions positively ingrained in the public mind it follows that people use cameras solely to record with. With no other idea about making exposures, people never assimilate what they hear about *pictures by photography*. To them " pictures " is an all-embracing term that includes their own trifles. They are content, even a little proud. What they select to expose upon still remains that unreasoning but *instinctive* choice, for which they can offer no explanation but the honest " I liked it." Our instincts prompt us to do many things that are not worth doing. But there are instincts and instincts. The best of them are diametrically opposed to the worst, and as impulses of action they form no excuse for the criminal who has neglected to respond to his best. Instincts, after all, can be developed, as the existence of the artist proves. Lacking any effort in this direction, the snapshotter remains a materialist at play, hugging to himself the thought that he is making a record of something and that this is a worthy end in itself.

THE DESIGN

THE recording impulse controls the photographer's method of approach. Is there a portrait to be taken; the victim stands fair and square before the camera. Why not, since that way presents the full and attentive view? In taking a structure of any kind the photographer's standpoint is, for the same excellent reason, squarely in front of its central features. He shows all he can of it. Why not, again? "I'm taking the building, am I not? Very well, what do you want me to get to the side for?"

Results of work done in this spirit are to be seen on picture postcards as well as in amateur's albums. Is it a garden with a herbaceous border, pergola, or summer-house; you will find the photographer planted in the middle of a path looking straight along it into the doorway of the summer-house.

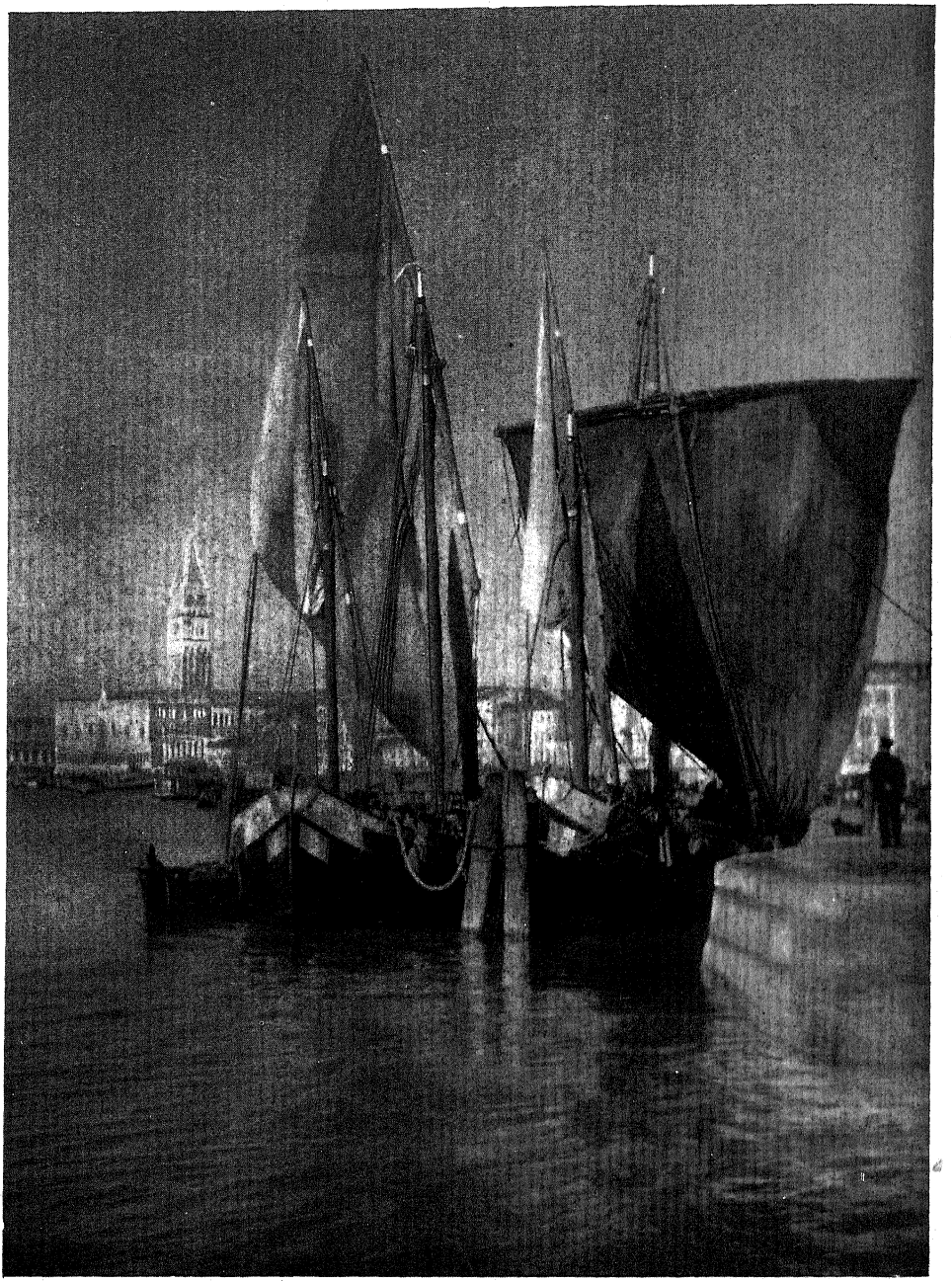
It is useless in most cases to try to explain that the grim formality of such arrangements is not pictorial.

The first step towards a better respect for pictorialism is to induce the camera-user to make exposure where there is nothing special to record. That will throw him off his pet fundamental bias. Even then he will look for a tree or a gate or something which he may get fairly and squarely in the middle of his view.

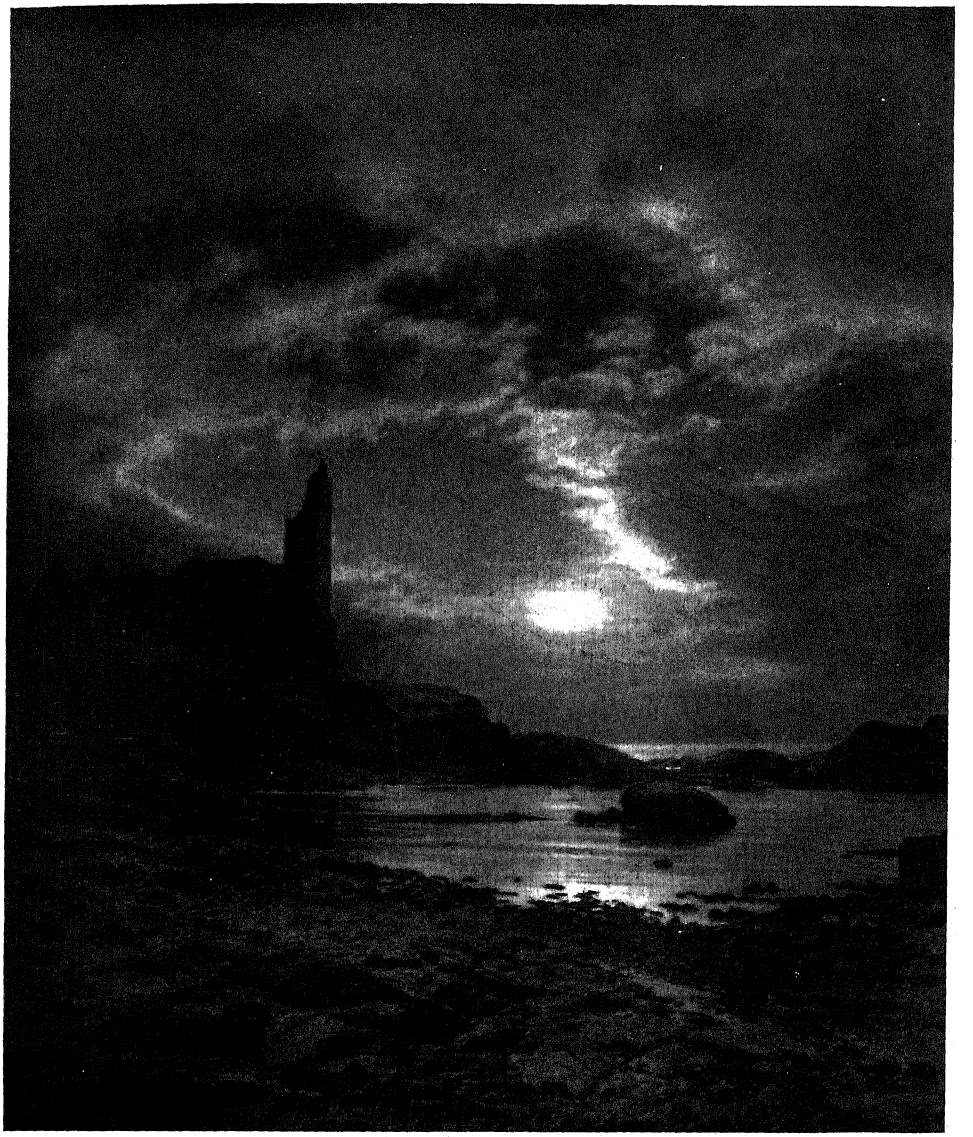
This centralisation of objects is perfectly natural; and the reason why it is not pictorial must be stated. It is useless to utter art-dogmas without giving the reason why; and if I cannot myself find a reason why, then I neither utter them nor listen to them.

THE SHADOWS LENGTHEN — Murry Barford

PLATE 10



A Venetian Waterway — James McKissack



RUINS — OLD IN STORY J. M. Whitehead

PLATE 12

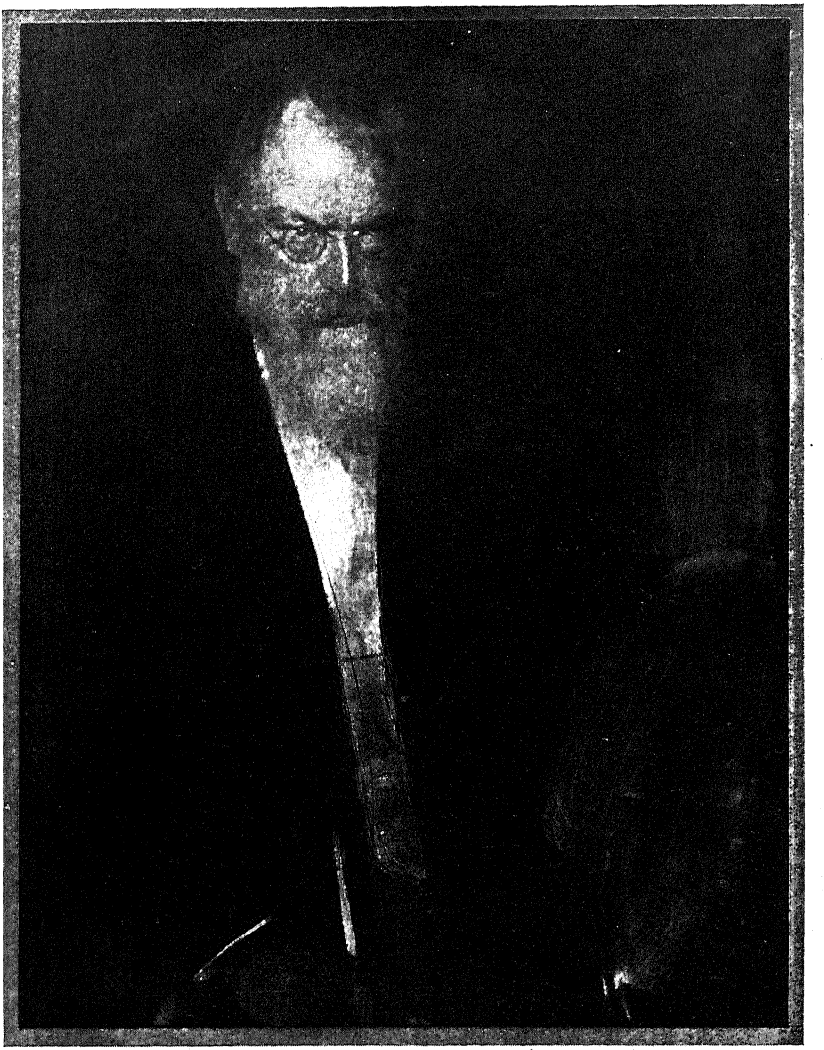
SANTA CRUZ F. C. Tilney

GOSSIP — KATWYK

Alfred Stieglitz

PLATE 14

BLESSED ART THOU AMONG WOMEN Gertrude Käsebier



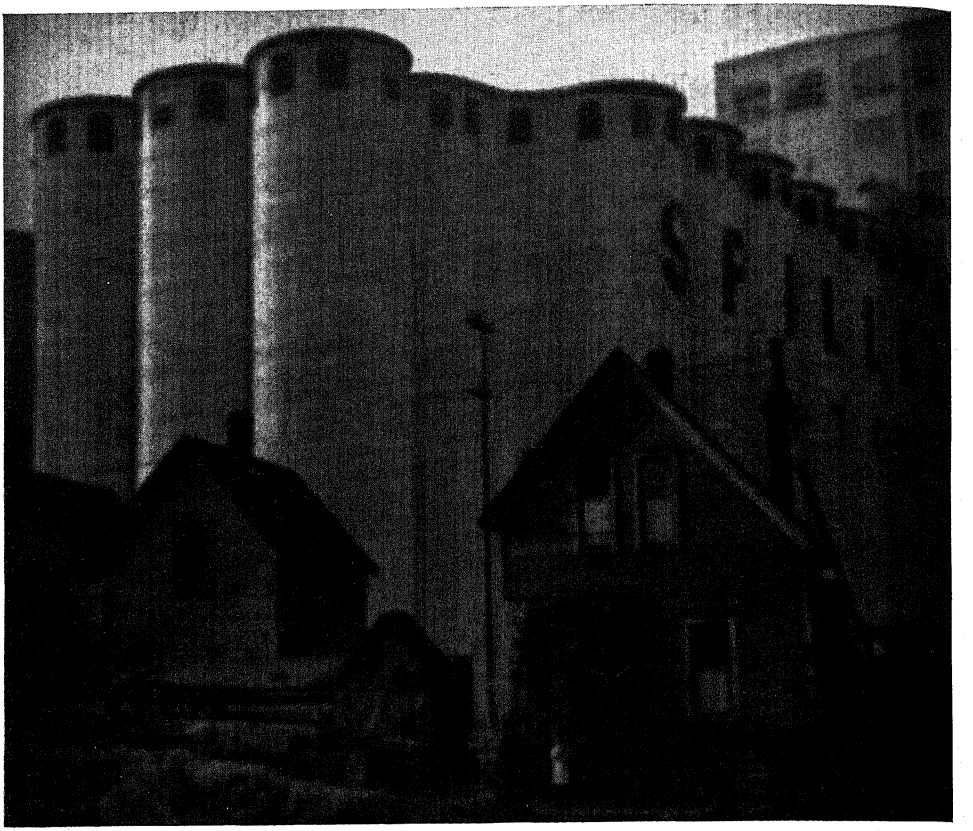
LENBACH — Eduard J. Steichen

PLATE 16

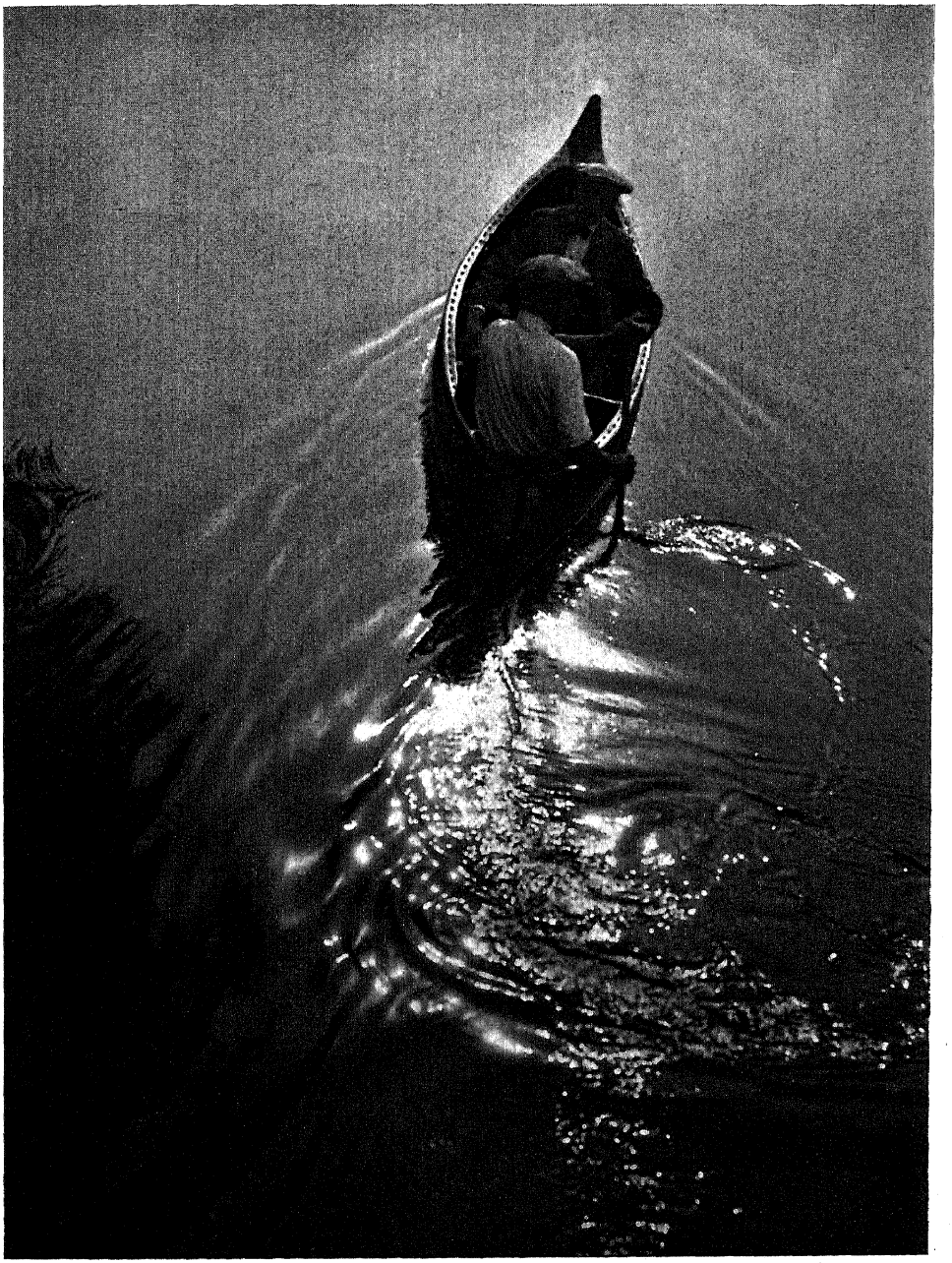
THE BRIDGE — LONDON

Alvin Langdon Coburn

PLATE 18



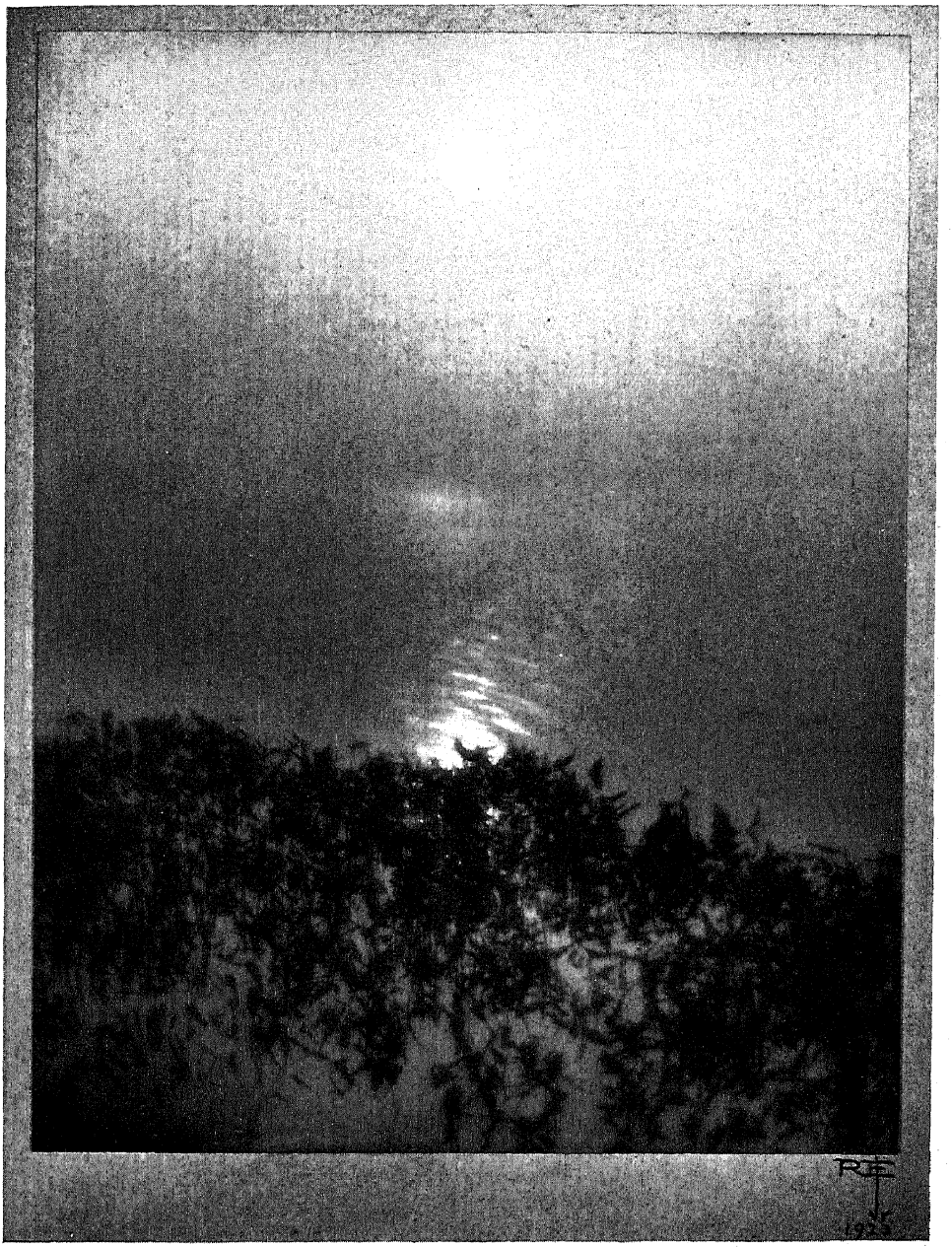
CASTLES OF COMMERCE J. Vanderpant



WHIRLING WATERS — Riso Itano

PLATE 20

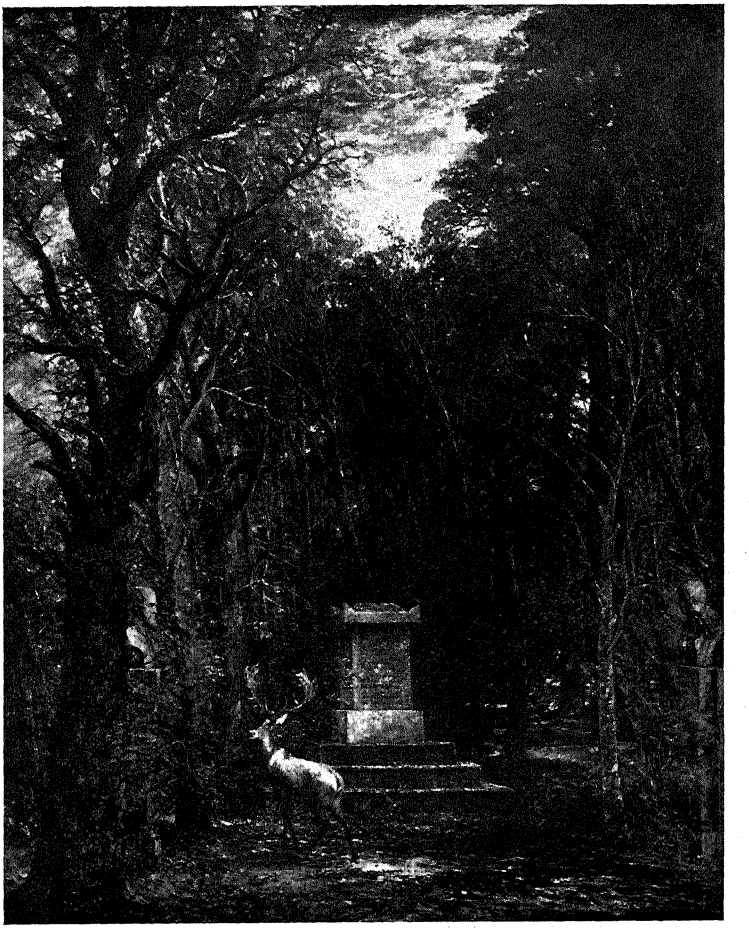
THE DANCER — Richard T. Dooner



A Summer Morning — Rudolf Eickemeyer, Jr.

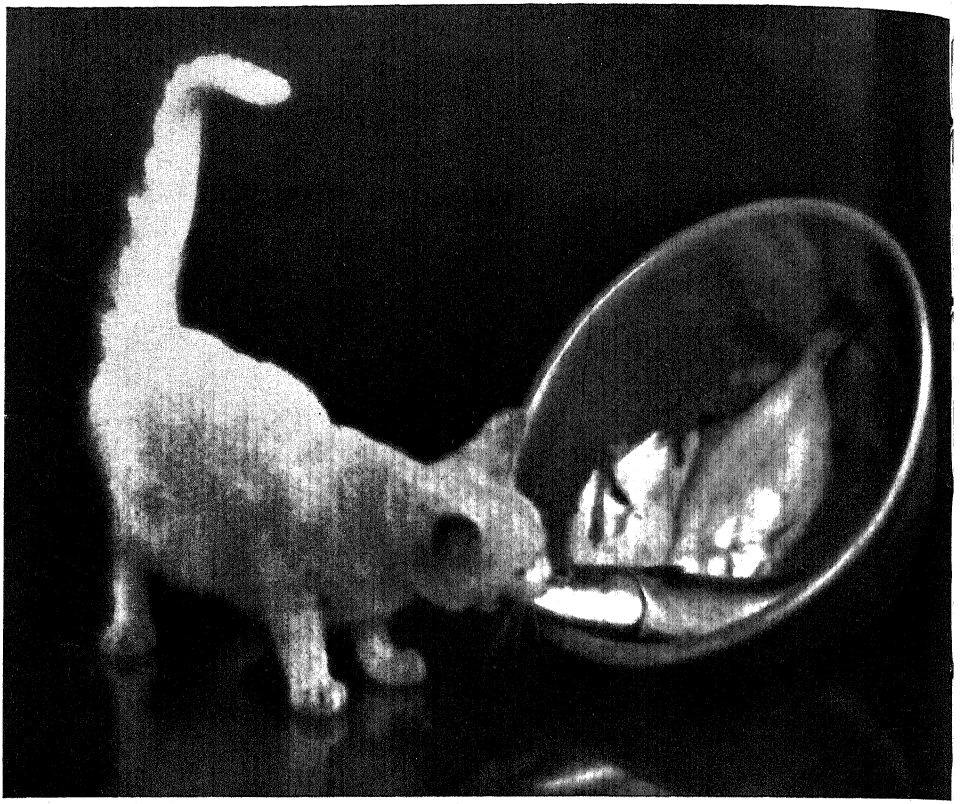
PLATE 22

BETTY BLYTH — Nickolas Muray



THE CENOTAPH — John Constable

PLATE 24



LITTLE THIEF

H. Torazi Mayeda

It has been said by many (who have *not* given a reason) that the centre of a picture is its weakest spot. Nothing could be more absurd. The centre is obviously the strongest spot: it is, in fact, too strong for most occasions, and it can only be weakened to an agreeable point by letting something occur there that is of no importance. If the central spot comes in the sky or at a point in a plain wall, centrality is neutralised, because the incident is, of itself, negligible. But, the reader may ask, why is centrality a pictorial fault? It is so because the importance of the spot gives to any object that is not utterly negligible certain associations that are not required for it, and which are extraneous to pictorial considerations. Centralisation implies respect. A man puts his dining-room clock in the centre of his mantlepiece and his favourite picture in the centre of the wall. The early painters put their Madonnas and representations of the Godhead in this position in their pictures. It is the position of respect. It follows that if you put an object of moderate importance in the centre of a picture it will at once profit by associations of reverence that are beyond the occasion. That will upset the balance of the spectator's regard, which will be drawn away possibly from some other object that really has better claims.

There are, of course, hundreds of pictures in which the central position is occupied intentionally by an object or incident to which the artist wishes to give prominence. Turner frequently so placed the sun, castles, or a leading group of trees; and this fact disposes at once of the assertion that the centre is the weakest spot of a picture.

The savage sets up an image or an idol in his temple, and more often than not he places subsidiary objects similar to each other on either side. The modern man treats his show clock in the same way by flanking it with a pair of vases. This is symmetry. Symmetry is one of the *forms* in art which evoke a *content:* the content in this case being reverence. Indeed it is not possible to think of any arrangement that

could so efficiently call up a content of reverence. By its means the early painters evoked feelings of worship and adoration for the centrally placed Beings in their pictures. It must be patent to any thinking creature that an arrangement that is, in an instinctive and elemental way, so productive of the intensest feelings in the human breast, is altogether unsuitable for cases where other feelings are required to be invoked. Symmetry is, therefore, best reserved for solemn ceremonies: the coronation of kings, the apotheosis of heroes, the canonisation of saints, and functions of a similar order. In any church one finds the altar central and all its appointments arranged symmetrically. From the same impulse early religious paintings abound in which not only is there a centrally-placed Being, but others — supporters, attendant saints, angels, and similar characters — are matched, like the vases on the mantelpiece, and ranged around in formal order, sometimes to make an exact pattern which would divide longitudinally into coincident halves.

Such symmetry, of course, varies in its content with the nature of the beings or objects. A ballet of bare-legged dancers are not exactly saints, but their frequent symmetrical disposition gives the formal patterning that endows them with a decorative decorum reflecting importance upon the central figure when he or she appears.

The striking effect of a symmetrical pose and arrangement is seen in " The Dancer " by R. T. Dooner (Plate 20).

But all this is deliberate artificiality: decorative artifice for a psychological purpose. You could not treat a landscape this way because a landscape is natural, not artificial. *Per contra,* a formal garden, an avenue, or the setting of a state building can be somewhat so treated because the beauty of such things is the beauty of artificiality.

The sun is so mighty a thing in our cosmos that if he be depicted in his mid-day glory at a central place, even though high in the picture, the result appears unexceptionable. Thus both Turner and Claude

centralised him except when he was low in the sky and had become accessory in status. R. Eickemeyer's sun in "A Summer Morning" could not be imagined anywhere but where it is without loss of a distinct feeling of rightness (Plate 21).

SYMMETRY

The portrait offers greater difficulty. The mental attitude of respect is supplemented in the portraitist's subconsciousness by the determination to record. He wants to get the sitter's identification marks; and to do so he believes that he must have him fair and square — the whole face, and he wants him quiet and attentive. This is exactly what happens with soldiers on parade. They are required to adopt an attitude that is the negation of any interest in things around them. For the moment, they must not be men but soldiers only. The purpose of an inspection is an examination of the fitness and proper equipment of the individuals. They face the inspecting dignitary who regards them exactly as the photographic tyro regards his sitter, or a building; that is, in a manner best fitted to find out things about them. The result in a portrait is a Buddha-like formality of pose that gives nothing of the sitter's mind, but an official-inspection sort of account of his body.

If then a full-face view is deliberately adopted, it must be for some special psychological purpose; an effect of intimacy or emotional intensity, such as does actually prompt the eye-to-eye gaze in real life. The portrait by Nickolas Muray of Betty Blyth illustrates the point. Her gaze has in it not a little of intentional and deliberate fascination which would have been less intense with a turn to the right or left. Here too, symmetry is discounted by the irregular display of the hands and arms: it is not carried through by the design as in the case of "The Dancer," where the idea is that of a cold and unimpressionable aloofness from emotion. There may be sublimity and beauty of a rigorous

sort in strictly formal symmetry, but grace and charm are neither sought for nor forthcoming. Variety admits them. (Plate 22).

TEACHING AND LEARNING

In what, then, does this grace and charm consist? "Tell me, teach me," says the aspirant. Alas! There are already more than enough trying to teach these things which are unteachable. All that the writer of a book can do is to point the path to their attainment and warn the pilgrim of snares and pitfalls.

The average photographer cannot or will not believe this. He believes that he can learn how to make pictures just as one can learn how to make puddings. When an honest teacher begins to talk of basic principles, the photographer grows disgusted.

"Never mind principles," he says. "Tell me what to do and how to do it. *You* know, why cannot *I* know." Of course such a demand brings copious supply in the form of magazine articles and handbooks. But the first remains unquenched. The photographer, having done what he has been told, still fails to reach the heights of his ambition.

The only really effective teaching comes of the learner's own observation and experience. Let him therefore make hundreds of exposures, and if he cons them diligently in the light of the experience of others he will find that they teach him more convincingly than do "rules of composition" and other precepts. These fine things get into his brain easily enough, but not so easily into his blood where, alone, they are of any use. Let him, then, keep on exposing with the object of making good selections. As the light breaks in upon him and he begins to see the real meaning and application of the precepts he has mastered, he will begin to think more and expose less. The finest and most sensitive camera artists expose very little. They have no need to experiment: they know by their eye what will make a picture, and the

more accomplished they become the more fastidiously they reject temptation.

The books and other media for imparting art-knowledge to which reference has been made, practically begin and end with "composition." The many other qualities with which the picture-maker must concern himself do not come into the curriculum to any extent; possibly because they are too elusive for superficial treatment. Yet this should be all the more reason why the student should be taught them. But the teaching of composition has become a sort of genteel industry. It is so simple. You paraphrase what everybody else has said, from good old Burnet downward. Amongst other hoary conventions, you refer to old masters of painting and diagram their works to show that they designed them on the principle of the pyramid.

It is not possible, in photography, to build up pictures upon any assumed authoritative scaffolding. Even the painter does not set out to design his pictures on a pyramid or any other system; though if it paid him to do so, as it might in the special case of some decorative space-filling, he certainly could. More often he, like the photographer, accepts the pyramid when it comes his way and is agreeable. If the necessities of the design as he works it out result in a pyramid shape he is content: it is as good as any other shape — but no better. Fortunately, in this respect photography that is neither still-life nor portraiture offers little opportunity for the theoretical "building-up" of the subject. The only principle in the pyramid idea is that naturally there are more objects and more points of support on the ground than in the air, and therefore we have more things massed below and fewer massed above; but that there is any special beauty in this arrangement over any other does not appear. On the contrary, the shape itself is lifeless and static compared with the more dynamic and growth-suggesting shape that is small below and large above — the leading design-principle of plant-life. To take an example: the Gilbert foun-

tain that was made to grace Piccadilly Circus in London, though beautiful in its detail, is unpleasantly lumpy considered as a whole, with its heavy base from which the mass tapers towards the top. But the crowning figure of Eros, or Hermes — whichever it is — has an ineffable grace and virility, largely because its mass is supported on one foot.

The great danger and unwisdom of deducing principles from painters' pictures is that the photographic student comes to believe that he cannot make a successful picture except on the lines of a pyramid, a diagonal, an S shape, or some other pattern; and he is lost when, facing a view that delights him, he cannot square it with any of the prescribed forms. He should throw them all to the winds. What he has to do is to *feel* that the shape, whatever it may be, is a pleasant one, though he may not be able to give it a name. That is to say, he must have the innate taste to recognise its points of fineness or feebleness. How can he attain to this taste? Here, precisely, is where the old masters come in! He must apply himself to the study of pictures — good ones; and that he may be sure of not being led astray by modern rubbish which gets into the public galleries, he had better confine his attention to the older work, unless the modern is above suspicion. He need only look and look and try to enjoy. The works themselves will silently teach. If the student listens to the travelling lecturers that now disturb the quiet moods of our galleries, he will be sent off on all sorts of queer and cranky sidelines. He had better, therefore, commune alone with the masterpieces. The advantage of this plan is that the student is imbibing at the fountain-head; not trying to gulp the deductions of art-pedagogues whose cooked-up theories from the old works are inevitably *a posteriori*.

COMPOSITION OR SELECTION

The student will find, if he can study pictures or their good reproductions, that the principles which make for fascination in pictures are

by no means exclusively those of composition; for composition is only conspicuous when it is bad. Nobody covets a picture because it is well-composed: fascination lies deeper. A very obviously composed work grows tiresome. The pictures of which one does not grow tired are those having subtleties of lighting and gradation, of contrast and quality, not less than charm of shape. All these attractions make up the comprehensive design — or intent — of the artist. Composition, the putting together of things, is but a part of design.

In photography, design is a matter of selection of subject; and although invention is not possible as the draughtsman achieves it, yet a fine composition presents no difficulty. The photographer designs by moving his viewpoint. He must change the relative positions of the items of his subject until they come together as he would wish them to. The painter sketching out-of-door does this also. If things refuse to come together — to compose — in a satisfactory way, the photographer must relinquish his hopes of making a really fine thing of his subject.

VIEW FINDING

Theoretically we must consider the area of the print as a field to be filled with an agreeable shape or pattern. It is impossible to think of design without regard to the space it occupies, and this is where the usefulness of the focussing screen, the mirror of the reflex-camera, or the " view-finder " must come in. The purpose of such apparatus is not only to show when the lens is rightly pointed to include what is wanted in the picture, but, in the case of small " fixed-focus " cameras particularly, to show in what manner the resulting negative will be filled. The bright view-finders on small cameras are inefficient because the reflected image is so small as to be almost indecipherable except in a there-or-thereabouts manner, and that is not good enough for serious picture-making. The open wire frame is a better device because it marks off the actual view; but here a difficulty exists also for the be-

ginner, who finds that the nearer his eye is to it the more he sees through it, and he does not know how close his eye should be. There is a device which removes this difficulty. It consists of two wire frames, a smaller one nearer to the eye. When the two exactly coincide, the eye is in the position to see what will be on the plate. These open view-finders are the nearest approach to seeing the actual projected image on the focussing screen, the advantage of which is that nothing else is seen at the same time — an advantage shared by the "reflex" among hand-cameras.

It must not be overlooked that view-finder and lens should be mutually adapted. The ordinary hand-camera has a lens with an angle of view approximately of fifty degrees. If a lens of narrower angle is substituted, the view-finder should be in some way adjusted accordingly, otherwise it will be promising a margin of view that will not appear in the picture.

For the prospector of subjects an excellent plan is to have always in the pocket a sketcher's view-finder, which is a black card having a hole in it about one-and-a-half inches by one. It must be held moderately close to one eye. When the camera is left behind this will be found a good self-educator in prospecting; and if the student can put down on paper, roughly, the compositions he finds, the education will be better confirmed. Practice of this sort induces the necessary ability to cut out a piece of a scene and regard it separately. After a little time the card can be dispensed with and selections easily made.

With this view-finder in use one can select passages that have the look of completeness in themselves; not betraying that they are a part of something else that is out of view. This aspect of completeness is the secret of fine composition. A leisurely look through Turner's "Liber Studiorum" will reveal the strength each picture gets from the fact that it is self-contained. The edges of these prints seem veritable walls enclosing the design. A carelessly chosen photograph has the reverse

appearance, looking as though it began and finished somewhere outside the edges. Lines run down and out; objects are chopped in half; big branches of trees jut in without any trunk to support them; men and animals have their legs missing at the lower edge, or their hair and hats at the upper.

A well-designed picture — and examples are not too plentiful in painted art — avoids all such anomalous conditions. Its lines are gracefully ordered within the space; its masses fill it in such a way as to make a definite "motive"; its darks and lights are balanced and contrasted to excite interest, and its "incidents" do not send the observer's ideas outside the four boundaries.

The beginner will find it a most valuable practice to look for subjects at all times, whether his camera is with him or not. The persistent effort to make a good design will assuredly develop the knack — for it is no more than a knack. Composition is the easiest thing in the world. By trying, the student stumbles upon the few great principles which underlie pictorial composition; and to stumble upon them is a far more excellent way than reading about them or listening to lectures about them. For to get the knack at second-hand is obviously to get somebody else's knack, and that is a tame pastime. Art is so eternal and inexhaustible that there is no need to imitate what has already been done, even by the Claudes and Corots. Year by year the landscape painters of originality produce new things in composition that are as admirable as anything done in the past. But they are only admirable by reason of the basic principles of good art. Novelties that are opposed to these principles are necessarily displeasing.

SYMMETRY MODIFIED

It is not possible to deal with every principle, but a few of the most fundamental may be discussed to set the student on the road. The first one that arises is that already mentioned, namely, centrality. If

an object seems to dominate, to catch the eye before anything else, whether it be a mountain, a building, a lake, a tree, or a figure, the certain thing is that the uninitiated person will put it in the centre, for the instinctive reasons already explained. He must adopt the only alternative — that of *not* putting it there. All the pictures that have ever been painted show by an enormous majority the overwhelmingly strong tradition for the mass at the side. It is easily seen that all who have made pictures have come unfailingly to this post-instinctive decision.

The foregoing arguments admitted, centralisation is nevertheless at times desirable and has been used with fine pictorial effect by the greatest artists. Turner was addicted to it, and his Norham Castle pictures all repeat the plan with minor differences. We have seen already the *rationale* of the formal figure in the symmetrical design, but the case of centralising a natural and irregularly-shaped object should seem a bad one if our reasoning is consistent. In the instances where it does not offend, but delights, the mind probably gathers some of the sublimity of the great thoughts associated with ceremonial and religion, and attributes it to the centrally placed chief object, thus achieving for it the impressiveness and glory that the artist wished. But the mere fact that an object takes a central place is likely to give the work a formal look, and it therefore becomes necessary to introduce some obviously lop-sided incident as a corrective.

In Constable's picture called " The Cenotaph " the formal design is saved from triteness by the introduction of a stag on the left-hand side. This is a case where the true and fitting content of symmetrical form is admirably evoked. I have dealt with it in a former work, " The Appeal of the Picture," and as this book is now all but out of print I may perhaps be allowed to quote a passage relating to the point: —

" The monument, which Sir George Beaumont erected to the memory of Sir Joshua Reynolds, is flanked by two stone pedestals sur-

mounted by busts of Raphael and Michelangelo. These three objects, although they would have borne representation from any other point of view, are nevertheless disposed in a formal manner by Constable, in whose mind the principle I have advanced was evidently present. He did wisely, for he showed us unmistakably by this arrangement that he also was actuated by the commemorative idea which prompted Sir George Beaumont. Had any other more pictorial point of view been adopted there would have been nothing to show that the artist wished us to share the reverent feelings which the monument should invoke, and the cenotaph, for all we could tell of Constable's feelings, might have had no more psychological import than would a view of accidental stones."

There are few pictures of natural scenery that are so symmetrically designed as this of Constable's, which without the stag would certainly approach the banal (Plate 23). Two other well-known works are alluded to in the book mentioned above. They are Boucher's " Amintas and Sylvia " — a piece of mere decoration — and Hobbema's " Avenue, Middelharnis," which is too well known to require reproduction here.

" Since no such psychological advantage (as in Turner's ' Norham Castle ') has been gained in the case of the Hobbema, there is less reason to think that the choice of the plan was deliberate in his case. In fact " The Avenue " might stand as an example of a formal treatment that serves no good purpose. That the middle third of the picture should be occupied by the trees, the heads of which form a central V shape, only points to a most unsophisticated method of setting out a landscape. Indeed it would appear that the painter in his honest desire to give literally the objects of his view, placed himself in the middle of the road to do so, without any thought of composition at all. Possibly he chose this standpoint because it gave the most familiar aspect of the avenue."

Today I should certainly add that Hobbema's idea was doubtless not restricted to an honest desire to give literality, but had also a tinge of the loftier desire to reverence the beloved characteristics of the village where this gentle soul was, at least according to some authorities, born and bred.

On the whole, pictorial photography is less in danger of this kind of sublimated symmetry and centrality than of the other kind which arises from the recording idea; and the advantage of curbing this propensity will be well worth emphasising.

The case of the front-view house or figure has already furnished perhaps the most important example. If the object is not centralised it will, of course, be at the side more or less; and that will result in a mass and an open space, filling between them the area of the picture. There, then, are two factors which can profitably be played one against the other. The space may be as strong an element of pictorial interest as the mass, and it must always be regarded so by the picture-maker. He could, in fact, find many a good thing that is nearly all space. When he gets this idea well in mind — that the mass is not to get in the middle and so leave no room for interest in the margins around it — he will begin to feel a desire to get the lumpiness out of the mass and to make it lie in the area with some significance. He will probably wish he could curve it some way round the space. Since it is impossible to curve a house, for example, what remains to be done is to curve the complete mass of which the house may be a part. This can be done by making other things mass with the house. Perhaps clouds may be pressed into service for the same purpose.

COMPOSING LINES

The wish for the curve is at the root of all appreciation of design. It is instinctive recognition of the principle of " line," as it is understood by artists, who by that word mean *alignment;* that is to say, a spatial

elationship between different objects. But in art, alignment of the traight kind is seldom so sought after as is the curved kind.

Let the reader look at the humorous "Little Thief" by H. T. Mayeda. When he has enjoyed the kitten's stalking, he will not have finished with the picture, for it has in its make-up much else that he will enjoy though perhaps unconsciously; and the thing that will cause most pleasure — apart from the subject matter — is the inclination of the bowl to the cat and *vice versa*. This arranges everything on an all-embracing line from the tip of the tail to the top of the bowl, inside of which the fish makes a broader link by being in a more immediate line with the body of the cat (Plate 24). This is the kind of thing that objects must be made to do in pictures. When we cannot move them we must move ourselves; in other words, change the view-point.

In discovering the best view-point we are not only finding the best-shaped objects: we are causing new shapes to present themselves by combining objects of all kinds; and although this is obviously enough a matter of massing, it involves also composition of line. This most important factor in picture-making is not easily explainable to the utterly uninitiated, who are apt to jump to the conclusion that the word "line" means the tracings of a point; that is, "length almost without breadth." No such Euclidean significance attaches, however. Lines that were really lines of this slim nature, even possessing a breadth of some millimetres, would be useless in a picture. Our "lines" are a clumsy synonym for the *directions* in which a series of objects may be placed; and the word is used exactly as it is in phrases like "a line of cabs." Such lines possess breadth in comparative abundance, and it is that which adds to their value.

Let us take a practical example of this resource. Here are about me some common objects of the studio. I put them on a drawing board: a lantern-slide box on end, a ginger-jar with some odd kinds of brushes in it, a cigar box and on it an envelope opener, an antique glass ink-pot,

and a glass jar with roses in it. I give an outline drawing of them (not too well done, but it will serve) (Fig. 1).

This haphazard disposition of the articles may stand for a likely arrangement of objects seen out-of-doors. For record purposes they are quite as well this way as any other; but for pictorial purposes they are totally uninteresting. Why? Because they have no relationship one to another — at least, such relationship as they have is not close enough. They are separated. They each maintain their dogged aloofness, and they are very obviously all in a row. These characteristics prevent our

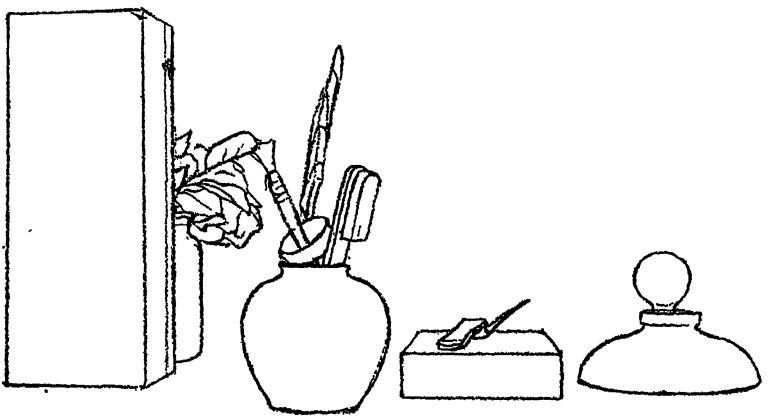


FIG. 1

having any sort of pleasure in the *collection* of articles, however much we might enjoy them *separately* if they were, say, objects in a jeweller's illustrated catalogue instead of these homely things. But the notion of composition is to devote the individual interest to the service of the collective interest. To do this out-of-doors we should shift our ground and walk round until we closed the items together and made them tell as one mass having an interest of its own. Similarly, I turn the drawing-board round until an arrangement comes in sight which obviates the separateness of the objects, gives them a common interest instead of antagonism, and converts the all-in-a-row disposition into something like

a curved wedge-shape. Note that no change has been made in the relative position of the objects: it is purely a matter of point of view. I make another drawing of this infinitely superior aspect, which gives the group-significance and becomes by a little stretch of imagination a picture (Fig. 2.) This is composition. What more than this composition is I do not know.

The little experiment explains how it is possible to curve the mass round the space, as before suggested, by a simple change of view-point.

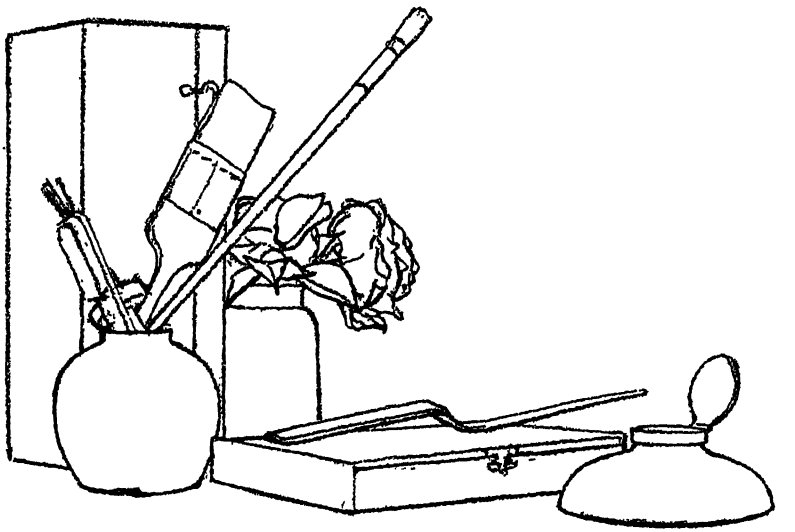


FIG. 2

Imagine these things to be buildings, trees and so on, and you have the conventional landscape design, the middle of which is filled with the sky. It need not follow that the objects should be all in one straight line on the ground as they are here. In a landscape, things far distant might tell just as the cigar-box and the ink-pot do, in the "pattern" of the whole mass; but even distant things are not greatly separated from the ground line when a low horizon is chosen; as it was, intentionally, in this group. More of the position of the horizon later. For

the present, what we must note is the importance to the photographer of surveying his subject from every point of view before making his final choice.

RADIATION

If the reader will revert to the first still-life outline he will see that although it is possible to regard its objects as forming a line as they stand in a row, they do not do so with any help towards a design. In the second illustration they combine so intimately that the idea of separate objects becomes submerged beneath the idea of the way they join up in a segment of a circle. To see them in tone instead of

FIG. 3

outline is to make this aspect more pronounced (Figs. 3 and 4). In the combined group (Fig. 4) the only "lines," according to the popular definition, are the brush and the paper-knife; but the student must recognise a line also in the hidden axis of the whole bending mass. Looking again at Fig. 2 it will be seen that the *directions* of the long-shaped objects converge; and even the leaning over of the rose sets up a direction that harmonises with that of the brushes and paper-knife. It is this converging or diverging disposition of adjacent lines that is the secret of beauty in line composition. In the disposition

itself there is no great wonder: it is the only way that lines *can* fall if they are not parallel; for even if they lie one across the other their parts radiate from the point of intersection.

We have come then to the principle of radiation: the sovereign principle in pictorial design. Radiation, connoting as it does both convergence and divergence is, *ipso facto,* an agent for two entirely

FIG. 4.

different sets of ideas in a picture's content. Therefore the student is recommended, in making his selection, to choose lines that radiate from some important point in the picture, because a strong radiation at an unimportant part will rob the principal object of its due importance. And it will do so for the reason that converging and diverging lines have the power of taking the eye along with them. It is as well, therefore, that they should lead up to or away from the most important point in the subject.

But besides this leading power the very disposition of radiating lines is beautiful in itself (an example; the head-dress in C. Borup's " Gabrielle in Black," Plate 25), especially when they are curved. (See

Fig. 5.) The picture-maker's duty is to employ to good advantage the curved lines that converge or diverge in any view he finds. Nature teems with them in roads, ruts, railway-lines, and all objects that are subject to change in form by distance and perspective. The success of the design of L. Wood's " On a Canal, Venice " (Plate 26) is due to his having chosen a point of view that sets up curvilinear radiation in the two bridges. Radiation is found also in tree-branching and in plant-form, and even the foreshortening of the ground gives rise to beautiful contour lines of the same character.

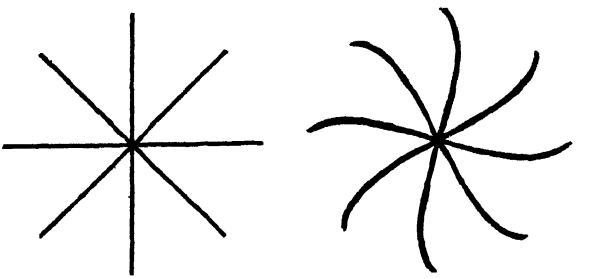


FIG. 5

Straight radiating lines, as they are seen in a cartwheel or a dandelion blossom, are seldom used as composing lines, though straight lines represent the rays of the sun. Composition requires the grace of the curve as well as the strength of the straight line.

Not only is it thus possible to close up together things that spot the view — bushes, rocks and so forth — but there is the chance of valuable aspects of line and shape revealing themselves in objects otherwise negligible until a thorough trial of all view-points has been made.

BALANCE OR COMPENSATION

Our still-life group also exemplifies another principle which is much advanced by art-teachers; namely, balance. Personally I do not think it a good word, because it does not properly state the case. If one " balanced " the items of a picture it would be doing one of the very

things that rules warn us not to do: it would be introducing a repetition and monotony of equipoise. In days past the terms " repetition " and " echos " were employed for the practice of repeating at another part some prominent shape occurring in the picture; but this is not what is intended by " balance." The principle that is really implied amounts to the fact that the large mass at one side will certainly make a composition appear one-sided unless something else, however small, exists on the opposite side to compensate, or to dispel emptiness. The big mass, however, cannot be said thus to be balanced; for balance is equality. The word " compensation " seems to me the more apt word to use.

In the diagram of the group (Fig. 2) the lid of the ink-pot, by its upward incursion into the open space provides, small as it is, almost compensation enough for the mass of the lantern-slide box on end. It at any rate attracts the spectator's attention as functioning at the opposite end of the bow or curve of the whole mass; and really no more is required. Too large an opposing mass may become competitive unless means are taken to increase the interest of the main mass.

Compensation is not only required for the general pattern in this way; it is also a resource of value in other directions. For example, it sets up a relationship between a near large object and a distant one, even when the distant object is so different in tone as not to participate in the pattern. This echoing of the importance of a near object by one in the distance helps the spectator to enjoy depth of space into the picture, for it emphasises the different vertical planes. In a little sketch I have endeavoured to show the application of the principle (Plate 27). The principle is likewise observable in the white building on the distant quay in " A Scottish Harbour " by Thomas Farmer (Plate 28).

SELECTION PROBLEMS

It is very rarely that the full possibilities of a scene can be appreciated at a glance, and this is why one finds oneself walking round, and

to and fro, endeavouring to make a choice. Not necessarily because there is nothing good enough; but perhaps because there are so many beauties that it takes time to disengage the mind from the mass of them, and to select the view which seems to be supreme. As one looks the aspect grows in charm; and the truth is that a place has to be known thoroughly before all its allurements are felt. The shapes, the tonal scheme and the effect of each appeal in a different way. The shapes are perhaps of most consequence, and it is therefore quite worth while to prospect a spot for shapes first and to find the exact standpoint where they come together with the best design. This is half the battle. The same standpoint may be taken on another occasion for trials of tone and effect, such considerations being at the mercy of the elements and of time and season.

Once in a while one can hit immediately upon a subject and feel that happy and enthusiastic sense of complete satisfaction which is the artist's greatest joy. Curiously enough this state of mind is rarer in a country that teems with pictures than in a district that is uninteresting and profitless; for in a rich country one suffers from the embarrassment of its riches and is always doubtful whether the best has been chosen. But in a more barren district, where one toils along dispirited and disappointed, the first possible picture that breaks on the view possesses the merit of being peerless, and one says, " Ah! this is better, now we are coming to something," and the contented feeling gives play to one's best effort.

PRINCIPLES AND RULES

The student picture-finder must of course select what takes his fancy. His fancy at the outset may be all wrong, but there is no harm in that. It is *his* fancy; that is the important point, and therein lies the germ of individuality of style and expression. As he continues, his tastes and fancies will improve just as everything else inevitably must. It is of vastly more importance to him to develop under the slow but

sure influence of nature's beauties than to acquire what are said to be "laws." He must bear in mind that principles such as symmetry, centralisation, massing and so forth, are not *laws*. There are no laws. Every man is free to make what fresh combinations please him; and in doing so he necessarily adopts *principles:* he cannot help himself. And, as we have seen, principles may be good or bad for our ends as occasion determines. They are our inevitable resources and that is all that can be said about their value. They are desirable or undesirable to us accordingly as we want to make use of them or want to avoid them, and that depends upon our mood of the moment.

However, there are certain *rules,* the observance of which will save the student from combinations that would be considered solecisms in our present conventions of culture. Even with these any man has a right to take the risk; but in doing so he risks not only the beauty of his picture but his reputation as a person who knows what mankind considers pleasurable and unpleasurable in pictures.

These rules amount to nothing more than acknowledgment of principles and provision for their safeguarding. Thus, deferring to all that has been said about centralisation, the rule about it amounts to this: don't put important things in the middle of a picture *unless they are fitted to go there* by reason either of their peculiar significance or their symmetrical shape. Thus we find how easily rules may be broken, however good they may be. How can one explain such contradictions to a person who only asks to be told "exactly what to do"? Art is precisely this — all second thoughts, alternatives, and compromises. It is a condition of things that would bring immediate chaos in science, but it is the very strength of art. The matter becomes clearer when it is remembered that a rule is only the recognition of a principle, not a recipe or a formula.

There are many rules, however, which are less fragile than that of centralisation. At least, I cannot easily see how any occasion could

arise when to break them would be advantageous, though it could not be said that they are inflexible. Here are a few: —

Don't have things dotted about in an unrelated way, but give them a relationship. This rule involves the principles of line and massing.

Another is: Don't fill a picture with a lot of incidents and episodes and accents all fighting with each other for the spectator's attention. This involves the principle of simplicity.

Another: don't let things that should be in the background " come forward " by usurping the assertiveness of things in the foreground. This involves the principles of aerial perspective or plane-recession, as well as propriety in literary interest.

Another: don't have lines making sharp-looking angles that suggest instruments of torture; which involves the principles of suavity and grace, flow of line, and many another.

Another: don't let your tones be noisy and harshly opposed, which involves the principle of harmony.

And yet another: don't let them be mulled and muffled and sweetened into feebleness — the outstanding risk in photography — which rule involves the principle of contrast.

It would be possible to find many more " don'ts "; but that would anticipate too many points that must be deferred until we have finished with the beginner's first trials at selection of subject.

SCHEMES OF LIGHTING

When, then, the picture-seeker has hit upon some combination that he thinks good, he must ask himself why he likes it. At first it will be almost impossible for him to answer; but experience will alter that. Possibly he may admit that the prospect is lovely in its softness and tender colour. That being so he had better turn to something else, for those qualities are just the ones that are least fitted for monochrome pictures by photography.

The most exacting mental process the student has to develop is this one of translating the charms of nature's colour into terms of light and dark. It is extremely difficult for a beginner, and he is, therefore, advised to make his first attempts in soft sunlight, or the bright light from thin clouds falling on some good solid-looking objects in the nearer middle-distance; things like picturesque buildings, well-defined trees or rocks, boats, and so forth. Such objects will give him definite shadows and structural lines. The sunshine should not fall directly on his subject from behind him, because that will cause all cast shadows to fall away towards the background, where they must necessarily be foreshortened and so almost lost to sight. Besides, the full flood of light on the front of things reduces modelling to a minimum and the effect becomes flat. The " roundness " or solidity of things is thus less well expressed than it would be in a side light.

Hold a piece of corrugated " packing " in the full blaze of light and see how little the corrugations tell, and then turn round seventy-five degrees or so and see how they tell in a side light.

But an absolute side light also has its disadvantages. It makes all shadows fall to the exact right or left, which will cause a rather pronounced parallelism of dark shadows telling as dark lines on the ground.

Avoid the exact side light if possible by standing so that the shadows come a little forward in direction. This will cut things up into lights and darks in the most effective manner, as F. Hanna's " Houses of Oraibi " demonstrates (Plate 29). The fascinating conquests of " against the light," and the still more problematic " with the light " subjects may be left for later days of prowess.

RECAPITULATION

Already the student has several things to think of. Let us recapitulate a little. He must not forget in the first place that he is out

to make pictures, not records. There is, therefore, no necessity for him to try for exhaustive detail, nor to show to advantage everything that he can discover in the view. He must beware of the temptation to " get in " this or that simply because it might look nice of it *were* in, or because it seems like missing something good to leave it out. If the bridge makes a good picture by itself the church will not improve it. Give the church a chance by itself. Pictorial photography must not descend to topography: its appeal is to the emotions as much as to the reason.

Another thing he has to think of is the centralising temptation. That church tower must not be in the middle. Neither must it stand foresquare frontal, so that one cannot see its sides. That is the second fault of the recording impulse already discussed.

A third thing that must be remembered in the first stage of study is that an object is better not lit by strong light either from behind the photographer or straight in front of him; but from the side and slightly in front for choice.

THE HORIZON

But these injunctions, let me repeat, are mere recommendations to the beginner: they are not laws, and the opposite advice in each case could doubtless be put to fine artistic advantage by an experienced photographer. For example, with regard to the height of the horizon, already touched upon, there are far more photographers, many of eminence, who show long foregrounds than there are those who make them short. Why this should be so, however, has always puzzled me. In landscape an empty foreground is precisely the part that is subservient: its subservience is valuable, doubtless; but it cannot be held to rank with the sky, the distance, or middle-distance in either beauty or importance. This is true of the painted picture: it is desperately true of the photograph, in which the foreground is frequently big and ugly.

Experience teaches the sad fact that the average photographer is so little prepared for his job as, in some cases, not even to know what is meant by " horizon." Several times I have heard it confused with the sky-line by people speaking at local clubs. The horizon is what you can see at sea where the sky finishes. If you are on low land amongst mountains the horizon is still where it was. It does not climb unless you yourself climb. It is always on the eye level. Immersed in the sea you may catch glimpses of it between the wavelets on a level with your eye. Up on the cliffs it is still on a level with your eye; also on the Eiffel Tower and in an aeroplane. Assuming that J. Ainger Hall was on the same level as that of his little figures, as he appears to have been when he exposed for " In the Valley of Luz," then the horizon must have been as low as the woman's white bonnet, although the sky-line is half-way up the picture (Plate 30). In Hoy Lee's " Palms " the horizon and sky-line coincide (Plate 31).

In woods and streets and within-doors the horizon may be hidden, but it must not be out of mind because it is out of sight.

The design of a picture depends much upon where the horizon would be placed if it *were* seen. To say that it is on the eye level is not to say that the centre of vision is always on the horizon; for the head may be lowered or upturned, in which cases the horizon will be high or low, respectively. If the camera likewise is tilted down the horizon will be high; if it is tilted up the horizon will be low, notwithstanding the fact that it may not appear in the picture at all.

Suppose a man to be standing on a rocky shore. He is both a painter and a photographer (*rara avis!*) The horizon is on a level with his eye as he looks straight out in front of him. If he lowered his head, keeping his eyes fixed in their sockets as a tailor's dummy does, he would miss the horizon; and to see it again without a fresh head-movement he would have to roll his eyes up. Well, then, our artist can put his horizon where he likes once for all in his picture, because

when he wants to paint the sea or the rocks at his feet, he can, without troubling his head, roll his eyes down, and when he wants to put in the sky he can roll his eyes up; the horizon never shifting in his field of vision as it does when he moves his head *a la* dummy. But when our versatile friend takes up his camera he is not so well equipped, for its eye is fixed like that of the tailor's dummy; therefore, the horizon is not stable in the camera, it slips up or down at any attempt to see more above or below. If the man takes a view of the sea — as he usually does — for the sake of the rocks and the bathers, his horizon will be somewhere near the top of the plate if it gets on at all, and there will be no sky to speak of, but seventy-five per cent of foreground, because he has tilted the camera down to get his bathers. With rocks and bathers in the sunshine he has every excuse — they are delightful subject-matter. With a sea responding to some entrancing or exciting conditions of light and air there is also good enough pretext for a high horizon seen from high ground; but for streets, roads, and floors generally — No! The practice is quite unwarrantable.

THE FOREGROUND SPACE

This aggrandisation of foreground matter, due to a high horizon, is a characteristic of photographic representation which for many years was accepted as proper and "true" and Heaven knows what else, simply because it came by scientific operations and not by draughtsmanship. It actually influenced painting at the end of the last century, when it was common to see in the Royal Academy and other shows, paintings of village streets that stretched from the bottom of the frame nearly to the top, at which spot there might be a barn or a tree and half-an-inch of sky. Fortunately, painting has now ridded itself of this depressing legacy and has returned to the conventions of the best period of landscape — both Dutch and Italian — in which a low horizon was favoured. It is strange to think that such an apparently

trifling matter as the scarcely perceptible tilt of the camera should once have had such truly epoch-making results. Today most good pictorialists of the camera take their cue from painting and keep their horizon at about one-quarter to one-third of the height of the picture from the bottom, as exemplified in the writer's bromoil print "Santa Cruz" (Plate 12), Floyd Vail's "Autumn Woodlands" (Plate 32), and many others in this book.

The low horizon is more consistent with what a man sees who looks around and ahead of him. It is also far more conducive to good design, since it emphasises the horizontality of the ground and the verticality of things that stand upon it. That is why trees, buildings, and figures always look more noble and dignified with a foreshortened foreground, and why the lines of the foreground itself gain character by being thus bent together and folded down into the smaller space.

To bring this about all that is necessary is, of course, to lower the camera, which is a vastly different thing to tilting it — the thing that usually happens. Yet the landscape student finds constant advice in handbooks and articles to hold his camera in front of his chest, and worse still, in front of his eyes. And this sage advice is what accounts for the blight of the big foreground in camera pictures. I have taken photographs with the camera on a low camp-stool with excellent pictorial effect, though of course with the lens raised as much as possible.

Most cameras are fitted with a rising front, a device to lift the lens so that the inverted image on the plate may include more of the upper part of the view. In architectural work this is an indispensable resource; for it is not possible to photograph a tall building otherwise. A far greater rise than makers usually provide for would in fact be advantageous: a rise great enough to place the lens opposite the upper quarter of a plate. This would meet extreme cases without the necessity of tilting the camera and then correcting the convergence of verticals by adjustments of the swing back.

It must be understood that the lowering of the camera, held level, brings into the picture much more of the lower parts of the view, and consequently more of the nearer foreground objects. This would appear to be the very state of things I am disadvising; but there is a different aspect in such a foreground from that of a high view-point and downward tilting. The latter not only gives a longer stretch of incidents but also the spaces between them. Level lowering, on the other hand, shows foreground incidents one *behind* the other and less space between them — not one *below* the other. It is this closing up of incidents that foreshortens foreground and gives a fuller sense of concentration and horizontality. Unfortunately, the lower point of view eliminates the matter at the top of the view; and therefore we must raise the lens to bring back tree-tops, roofs, and sky. This, again, cuts off the nearest foreground, which can well be spared, leaving enough that is proportionate in scale as well as otherwise unexceptionable.

The recommendation to hold a hand camera at the eye-level sounds like wisdom itself. Our eyes are in our head: we see from the head level: ergo, hold the camera at that level. But this is a most specious argument. In the first place, as I have shown, the camera's eye is fixed, whilst the human eye is never still. In the second place, the man who looks about him for pictures does not keep his eye on the foreground but on the distance and the sky, and anything that comes in front of them. The gaze of the artist and that of the botanist differ in objective, in focal-length, and in definition. The landscape painter does not want sharp eyes, but he likes to look at long range. Standing, he can of course see foreground up to his feet if he chooses to roll his eyes down; but he usually takes cognizance of little that is the hither side of a middle distance, and then only to " treat " it. Moreover he frequently sits to his work. Corot sat and never painted anything nearer than a middle distance. If one could be assured that a camera held to the height of a standing man's eyes would be absolutely hori-

zontal, the horizon would still be too high for pictorial purposes because, theoretically, it would come exactly half-way up the height of the picture — a distressingly banal arrangement. But is the hand camera ever held level? That "pointing" idea, that "shooting" notion, are perhaps responsible for an unconscious "sighting" of the chief object, which if it does not happen to be a mountain top or a church tower will assuredly lead to an unsuspected downward tilt. A tilt from the height of five or six feet, to say nothing of the urge to mount steps, knolls, or other vantage-points, gives the foregrounds and their Gargantuan scale the ubiquity of which all art-lovers complain.

These remarks apply principally to flat ground, streets, and similar conditions. Amongst the hills there will be a large proportion of the picture below the horizon; valleys, ravines, and so forth; and they are good pictorial material when looked down upon. But even then the sky-line should not be sacrificed if it can be saved. It is difficult to give, without the aid of color, the expansiveness of views that are backed by mountain-sides. The position is not immediately obvious as it is when even a peep of sky is seen, for that clears up at once the story of the lie of the land.

The low-horizon, nevertheless, is as essential when the photographer is among the mountains as it is when he is on a plain. It is far lower than one would first think in F. R. Fraprie's "At the Foot of the Simplon" — not more than a quarter of the height from the bottom (Plate 33).

Though it is not necessary to have the actual horizon in view, there are occasions when one likes to know whereabouts it would come. It can easily be found. All lines of roof-eaves, window sills, railway bridges, even five-barred gates, that we know to be horizontal in structure, will indicate the position of the horizon when they are horizontal *to the eye, no matter in what direction they lie.*

It is not necessary to do more than refer to the illustrations in this book for evidence of the gain of stateliness to tall objects when the horizon has been seen low. Mr. Chas. Clayton's " Chicago " is a good example, because it would have been so easy for him to give the looking-down-upon view (Plate 34). Things that rear themselves majestically, such as buildings, and trees, should be pictorially regarded from their bases, so that their full length can be relieved against a background, preferably the sky. F. O. Libby thoroughly understood this when he was inspired to make his " Harps of Æolus " (Plate 35). The Japanese method is the exact opposite of this; it generally is a violent tilt that leaves not only a sky-line, but the horizon also, far above the limit of the picture.

When one is dealing with garden-hose and dicky-birds there is no room for loftiness of idea, however charming the matter may be, as H. Onishi's " Corner of the Garden " shows. It is a work admired by all (Plate 36). Or when humour, a strong natural history interest, and unimpeachable technique are united, as Walter Rutherford has united them in his delightful picture " A Frog he would a-wooing go," one is quite content to dispense with a sky-line and look down at the fun (Plate 37). But these are not landscapes. To *look down* on noble things is to treat them in a way actually implied in the phrase colloquially. We should *look up* to them as figuratively we look up to all things that command respect. The nearer we get to the aeroplane view, the more are stately things stunted; and the worst indignity is reached when buildings are hidden by their roofs and men appear as hats with a leg before and a leg behind. As for the landscape, it becomes a mere map.

Following out the principle, it is possible to endue the most prosaic object with dignity by giving it the towering aspect and height-space that the low view-point affords.

When the main essentials of good selection are mastered, namely the completeness of the subject, the best point of view for pattern, and the best position for the horizon, there will be no difficulty in picking out promising pictures with readiness. But there will still be a few pitfalls to avoid and a few goals to make for. We will deal with as many of these as we can.

The beginner who looks for objects, naturally looks for objects of interest. That is right enough if the thing he selects is also interesting artistically. If it is not, its interest, literary, human, historical, industrial — whatever it may be — cannot help pictorially. Pictorial interest is only concerned with the appearance of the thing, not at all with its worth socially or nationally, though that worth is all to the good as a secondary asset.

PATTERN

Assuming that an object interesting in some way or the other has been selected, the first concern of the picture-maker must be to make it imposing. It is quite possible so to arrange matters that it becomes the reverse. Next its lines and mass must be disposed so that it shall be the most pronounced part of the pattern. And it may be advisable at this point to define a little more carefully what "pattern" means. There is in every picture a relief of dark things against lighter things, and when these contrasts tell in a general way as an easily seen shape of dark tone against light tone or *vice versa,* that comprehensive shape is said to be the "pattern." Perhaps there is not a more obvious illustration of this than Mr. Libby's "Harps of Æolus" (Plate 35); but it does not follow that nothing but a silhouette effect will produce a pattern; nor that it must be either dark or light. The very pronounced example of "The Old City of Mostar" by Clara E. Sipprell, is light on dark (Plate 38). Victor Kammerer's "Venice" has silhouetted

figures, but the major part of the picture is of vertical and horizontal lines, and these make a pattern of unusual character which is not relieved at all (Plate 39). Edward Mudge shows in " Peace " the kind of things that painters regarded as pictorial pattern before photographers began " squeezing the orange " with their slats, girders, shadow-shapes and other obvious and crass acceptations of " pattern." Mr. Mudge has an ordinary landscape with a restful mood and a most emotional message of nature. He enhances the reposeful mood by making his trees join into one fretted patch of dark, continuous in its curve from the right top to the left lower corner. Instead of two tree-groups and a reflection of one, we have them all united into a single motive of the chief dark parts. This is patterning of the painter's kind (Plate 40).

THE CHIEF INTEREST

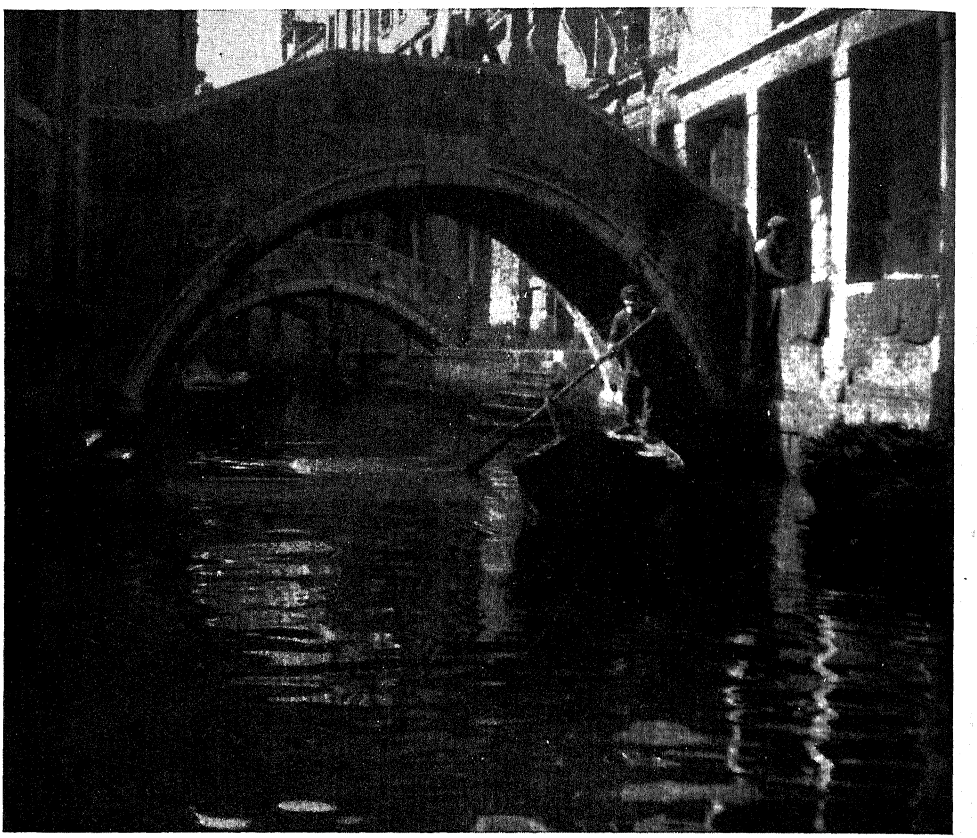
The chief object of interest, be it a building, a tree group, a hill, a figure, or a head, should really give rise to the pattern, not be a mere subsidiary part of it. This well-understood requirement has led to a very good rule that there should be but one prominent point of interest in a picture. That is to say, when the object is chosen as the leading theme it must not be belittled by anything else: it must not be the second or third thing one sees, but the first and the last. The other elements should support and enhance its attractiveness. This principle of the pattern arising out of the chief interest is excellently observed in E. G. Dunning's " Girl in the Doorway " (Plate 41).

AVOIDANCE OF EQUALITY

To have two things of equal and great importance in one design is to create a feeble effect, especially if they are of the same description, such as two trees. Imagine them side by side but separated: how hopeless a deadlock there seems to be in all emotional regard of their arrangement. One gets the bad effects of many good principles:

GABRIELLE IN BLACK — Charles Borup

PLATE 26



ON A CANAL, VENICE — Lionel Wood

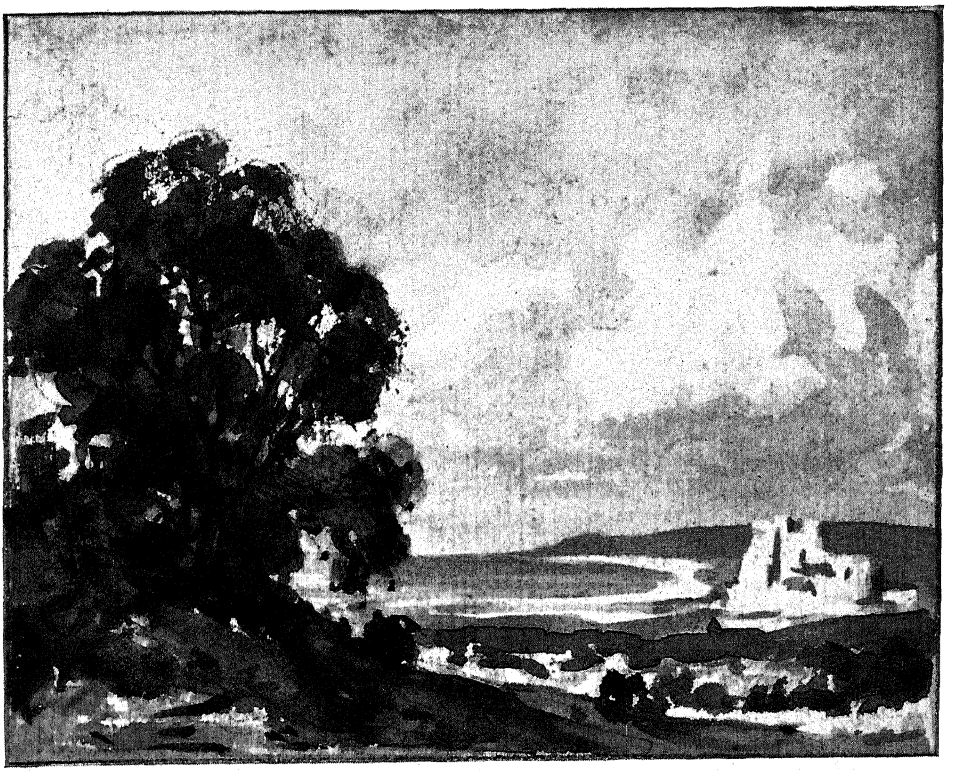
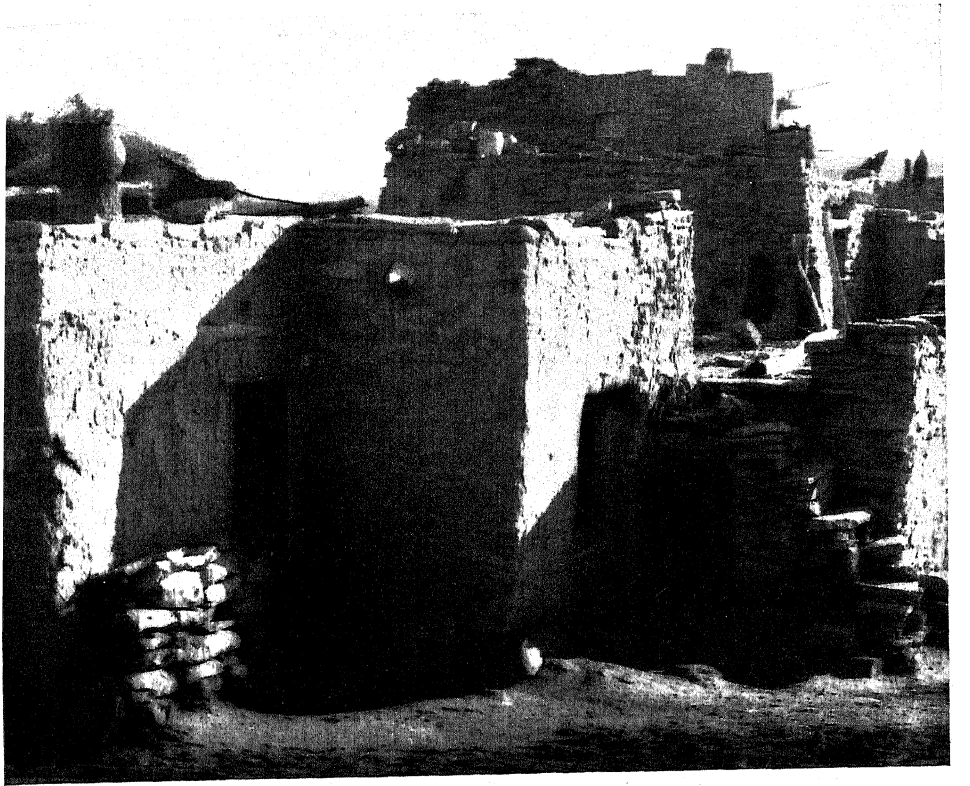


DIAGRAM OF THE PRINCIPLE OF COMPENSATION F. C. Tilney

PLATE 28

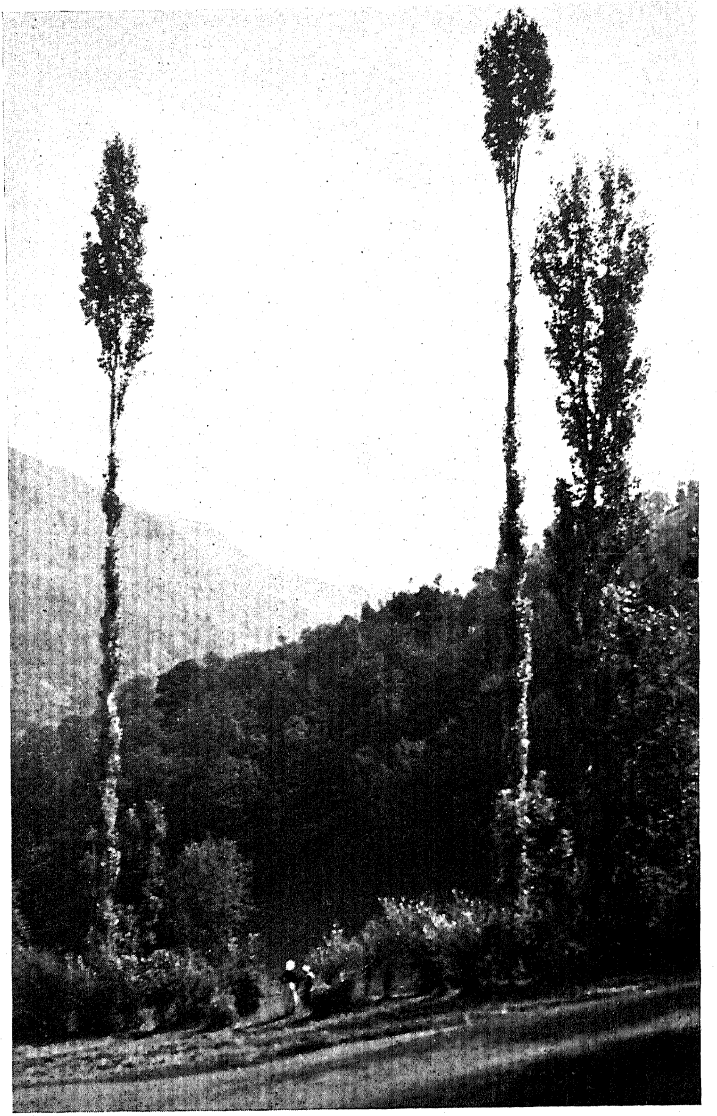
A Scottish Harbour — Thomas Farmer



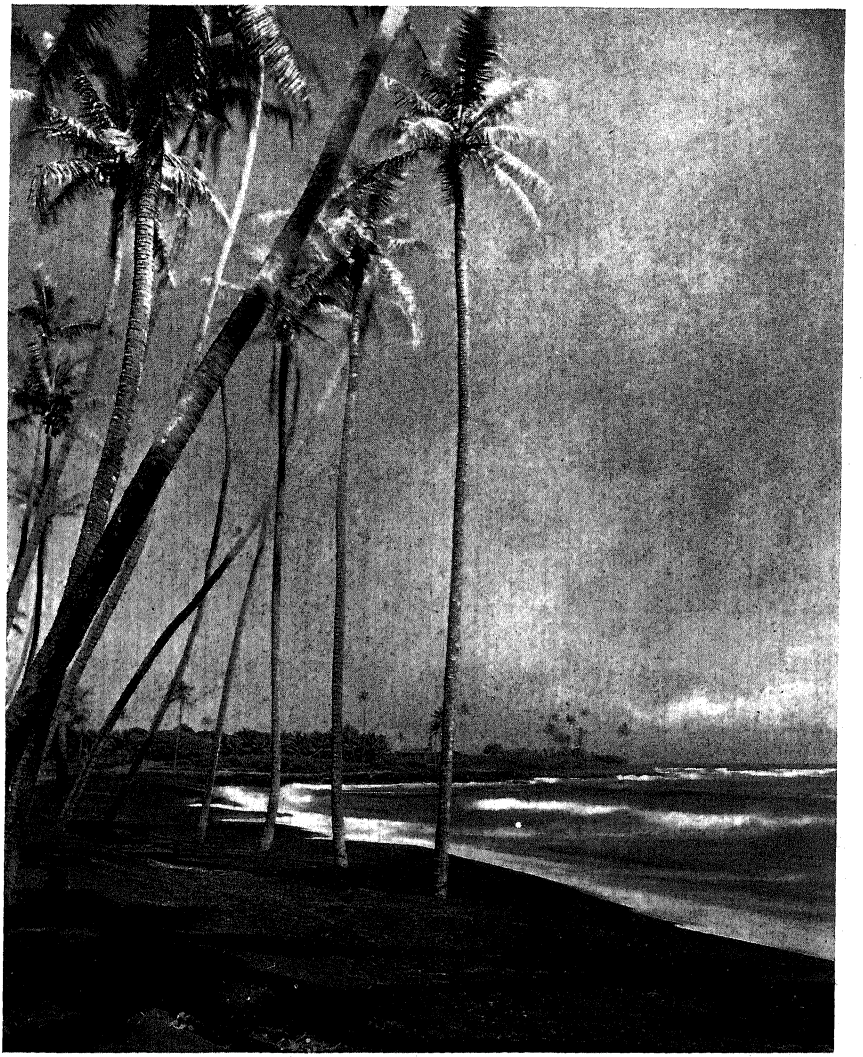
HOUSES OF ORAIBI

Forman Hanna

PLATE 30



IN THE VALLEY OF LUZ — J. Ainger Hall



PALMS

Copyright by Hoy Lee

PLATE 32

AUTUMN WOODLANDS

Floyd Vail

repetition, equipoise, monotony, formality, and so on. But let one be a deal smaller than the other, and all sorts of interesting conditions are possible.

In the same category of circumstances are found the proportions and divisions of light and dark in a picture. They must on no account be equal. What is admirable mathematically is not always so pictorially. The mind of man regards a picture as something outside the

FIG. 6

logical humdrum of life. What is expected is the pleasure of surprise. So, although it is natural for a person who is required to divide something into parts to make the division fairly and accurately into halves, quarters, or thirds, such mathematical law and order is disappointing in a work of art, where the perfection of scientific machinery is not looked for. It happens therefore that a sky-line, the horizon, or any bold division is unpleasantly placed when it comes exactly across the middle. Still worse is it when a large mass divides the width also of a picture into halves, thus quartering the area as in Fig. 6.

It has already been pointed out that the empty space is equally as strong a factor in design as is the mass. If these are alike in area there will arise the same objections as there were to the sameliness of two trees. We may go further and say that any two masses whether they be light or dark should not be equal either in area or in " weight."

Likewise the student should avoid subjects that present an equal distribution of such areas and weights, for the reason that in such an arrangement the mind's attention is equally claimed by the several accents or incidents and the feeling of complexity arises instead of that simplicity which is a never-failing pleasure. With the importance of the main interest well established, simplicity, both of literary and of pictorial interest, is secured, as in " Light from Heaven," by S. Bricarelli, and " Peaks and Ravines," by R. S. Lovejoy (Plates 42 and 43).

With these points in mind it will be possible to appreciate the immense gain in the content of impressiveness in these two works, due to the simple statements of massing and spacing. The plain areas have a sedative effect on the mind by reason of their freedom from appealing detail. Thus it is that *form* evokes *content.*

Complexity arises also when there are too many incidents. A picture can easily be too full of points of interest. The average negative frequently confesses to this fault, which may be avoided either by the selection of a smaller portion for enlargement, or by another view-point which by aid of massing, sweeps together into one group the smaller competitive incidents and leaves the field thus simplified by fewer and larger parts. All this applies to spots of tone as well as to items of form or outline.

The advantage of this simple statement of things is a purely psychological one, and is felt by the spectator in the readiness with which he can take in the picture's message, since it makes an immediate im-

pression without embarrassment or hesitation. Pictures should not be puzzles.

The three views of the Woolworth Building are from an excellent article by Wm. S. Davis on the subject of "Effective Trimming" which appeared in *American Photography* for September 1926. These selections very clearly show the advantage of avoiding a large collection of equally important incidents. The first has no pictorial attractiveness whatever, although the identical factors which make the third so agreeable are there to be seen when they are looked for. But so are numerous other equally promising combinations. In the middle version there are much fewer, but the tower and its immediate surroundings are still suffering from a dilution of interest. In the third version, the tower has it all its own way and appears to rear itself in proud consciousness of domination. The supporting masses fall into a most satisfactory sky-line (Plates 44 and 45).

UNITY

All styles of composition and all modes of pictorial representation can be made to serve the important ends of unity of interest. Given a motive or theme, lines may be contrived to lead the eye to it; masses to support it; repetition to enforce it; gradation to lead up to it; contrast to enhance it; and so on in endless resource.

POVERTY OF IDEA

And now comes the inevitable warning not to sacrifice wealth of material to over-zeal for simplicity. It is often done in photography. One sees things that are reduced to the absurdity of absolute barrenness or poverty of idea. This is a worse fault than complexity. There are many admirable and famous works of elaborate fulness. Rubens, particularly, has left us pictures that are replete to over-crowding of figures, architectural features, landscape items, and much beside. Their

complexity is the opulence of artistic worth; but it is never an embarrassment because no one knew better than Rubens the supreme value of massing; and for his accumulations of incident and cascades of figures he thereby secured the dignity of simplicity. In former days when canvasses were vaster and when painters showed their power and resourcefulness in dealing with elaborate scenes, the paucity of modern themes would have been considered a confession of weakness. The swing of the pendulum has brought a sad reversal of the old munificence in idea and effort, and has made fashionable an affected simplicity. In photography this affectation has gone very far and produced things like a single lanky tree; one reed growing in the water; or one rose in a jar; though it is not to be imagined that such puerilities are the result of any serious considerations of art.

CHIAROSCURO

The student, having given himself some exercise in subject selection upon the recommendations made, will have found himself faced by another set of factors which have not yet been dealt with here. He will have noticed that his preferences have been sometimes affected by the lightness and darkness of the objects of a view: in other words its tonal attractiveness.

All objects reflect more or less light to the eye, and accordingly as they fail to do so, thus appearing more or less dark, they are said to be " in tone."

Objects which for any reason are not very dark are said to be " high in tone "; those that are dark are of " low tone."

Tone, therefore, as the term is used in art criticism, is the degree of non-luminosity of an object.

Beauty of pictorial tone is a more subtle matter than composition; requiring more skill and far more experience, for it depends upon natural conditions and must therefore satisfy the reasoning part of the

mind as to its naturalism; whilst design, having no such obligations, need only satisfy the sensuous department of the mind.

Pictorial tone is not the same thing as shadow; although cast shadows and general shades may usually account for it. The colours and texture of an object are factors in their reflection and absorption of light, and it follows that it is possible to have things in shade reflecting more light than others in full illumination.

The colours of the component parts of a landscape are therefore factors in any scheme of lights and darks. The combination of these lights and darks is the supreme art of the monochrome artist. It was first called by the Italians, and now is called by us, chiaroscuro (chiaro = light; oscuro = dark). This word is frequently, and quite wrongly, regarded in books as synonymous with "light and shade," which as a technical phrase, is used in art schools for the study of model-drawing. Chiaroscuro is a deal more than this.

As in line and massing, simplicity of motive is equally advantageous in tone, perhaps even more so, for nothing is so satisfying as a broad simple statement of two or three areas of generalised tone. That condition of things has quite as much to do with the success of the nude study "Meditation" by H. B. Turner, as the tranquil pose and beautiful lines. Practically there are three general tones in this work. It is because the high tone is not permitted to get into any other parts than the figure that the flesh seems to gleam so remarkably (Plate 46).

To take a different example, "The Only Two" by Johann Helders, which certainly is a clever picture, seems to suffer, in my view at least, by the two tables and the two lamps. The right-hand group was surely motive enough. It would by itself have made a searching and delightful study of direct and translucent lighting. But the nearer tables are worse than competitive: they are aggressive in their claims. If their lamps had been switched off, the tonal qualities of the picture would have gained a good deal (Plate 47).

Although the photographer, like everyone else, is attracted by the beauty of nature's colour, it becomes necessary for him to learn to estimate this colour only as so much lightness and darkness when he is choosing his subject. To determine to make a picture of a view that charms as a glorious colour scheme is probably to determine its failure as a photographic picture. There is no way whatever in monochrome art of representing colour contrasts. The photographer must do as engravers have always done, get the effects of colour contrasts as nearly as possible by tone luminosities. Some have used coloured glass through which to view a scene, as a help towards reducing it all to a monochrome. Others have employed a black mirror. These devices are useful up to a point, but neither gives the truth. One betrays contrast, and the other betrays luminosity. They only remove the delightful embarrassments of the diverse hues. To look at a rose garden, or any display of brilliant red flowers, through a piece of green glass or celluloid, is to find that all the roses have disappeared. This must be a warning of what is likely to take place in any photograph of a scene that is ravishing to the sight on account of its colour. The student must, therefore, ask himself whether he is admiring shapes, tones, or colours. The third is a trap for his unwary enthusiasms.

He must allow trial and experience to fit him with that judgment of a scene which will enable him to foretell its monochrome possibilities. It is better to make failures at the outset than to try by much sophistication to avoid them; for the subject is so elusive that instruction is rendered less useful than that most convincing of teachers, " trial and error," which means educative failures.

Having now dealt with the leading matters in selection of subject by the beginner, we must give attention more fully to various pictorial questions on the assumption that the reader is no longer a beginner, though still an aspirant.

BEAUTY OF SHAPE

THERE is one matter that should be touched upon in connection with subject-matter. It is the apparent insensitiveness of the average photographer to beauty of form. In architecture he is unable to escape it if it is there; and, moreover, architecture having the credentials of reputable critics, the photographer takes styles, proportions, details, and carving a good deal on trust. Notable examples are known and scheduled. It is not so in landscape.

Trees, for example, have great beauty of shape, but it is a very neglected kind of beauty. Trees are so often seen that people get into the way of considering them as all more or less alike. Comparatively few photographers know one kind from another, which means that trees have not for them that attraction which inevitably produces knowledge. To the nature-lover trees are the most inspiring objects of the countryside from the pictorial point of view. Their infinite variety is a constant joy in the depicting of landscape, each species having its own characteristics of form and colour — inexhaustible pictorial resource even when they are thickly placed as in woods and copses. A wood on a hill has its particular edge or sky line: the birches with their soft thin tops; the beeches and the elms with more rounded tops giving a smoother and " tighter " outline; the oaks more broken and fretted; the aspens sharper in their serrations, and the firs with their spiky sky-line, perhaps the least lovely of all.

In the woods, leafage is largely lost, but the trunks show to advantage, and some of the loveliest sights are afforded by the smooth stems of the beeches in longitudinal segments and variety of tone — grey with darker markings of moss.

All trees may, by the exigencies of their growth, present a deal of character in the forms of their stems and roots. A tree never forgets the struggles of its youth; and in age it presents a sort of exaggerated record of its youthful impulses. For picturesqueness and the grandeur of age, their gnarled and contorted growths offer most valuable subject-matter.

FIG. 7 J. M. W. Turner

Seen as a whole, free-standing against the light, the uprising and branching of trees give never-failing delight. The principle of radiation is in full play, the lines of the branches often springing from a point in the earth and then developing further systems of radiation until the twigs complete the network. No artist was more alive to these characteristics than Turner. He unfailingly gave the grace as well as the dignity of trees, and he was doubtless partly drawn to this source of inspiration by the works of the older painters, and of Claude in particu-

lar. I give a careful tracing of part of the etching " Sheep Washing," which is one of the unpublished plates of Turner's " Liber Studiorum " (Fig. 7). This is an example not only of the beauty of stem-structure, but of the masses of foliage; both equal factors in the grace of the tree group, and both directly derived from the artist's learned appreciation of the complete organism.

The painters of the past differed from many of the present day in being draughtsmen, and the best of the draughtsmen seem to have taken a special delight in indulging their skill by depicting trees with every grace of form and growth. Dürer, Titian, Rubens, to mention no others, have left many evidences of this love of tree-shape.

Does the average photographer sufficiently school his observation and feeling in this direction? It is to be feared not; and the reason doubtless is that he nurtures himself upon photographs and not upon drawings and paintings. Consequently he lacks efficient leadership. The blind cannot lead the blind. It is no answer to say that if trees are so beautiful photographs of them must necessarily give their beauty. This is the old " beautiful fact " fallacy. Trees are not beautiful at all times and in all ways, and any unselected representation of them will not extract those principles or essences of their beauty in the way that the keenly responsive artist does. The painters generalise, idealise; and whilst omitting the unfortunate accidents, they glorify the happy chance. Once having become alive to this eclectic beauty in representation by artists, the layman's eye is likewise able to detect it in nature. This should be the educational method also of the photographic pictorialist. If that old favourite, " Harding's Lessons on Trees," could come into his studies, there is no doubt that his tree photography would become a passion. To look at the trees in " The Shadows Lengthen " (Plate 9) is to feel sure that the left hand group was selected by Murry Barford for the admirable display of its branches

and the quality of the lights that show them off. The elms upon the other side are likewise interesting in their shapes.

Tree character depends not only upon radiation. If it did no more than that trees would be formal things enough. They modify that formality with the delightful surprises that give them their individuality. There is always in their parts that "similarity with a difference" which is a factor making for delight in design. Not only do stems and branches differ in their way of radiating, but they have wayward fancies of their own which give character to the tree, whether bare or in leaf. In the leafless state one can easily detect the why and the wherefore of the allurements of their form in leafage. It is then that we see the great horizontal planes of the beech-branching which give the great fan-like spread of foliage; and in the lombardy poplar we see the hooks in the branch that are caused during growth by a new shoot mastering its predecessor in the general upward race.

The elms have a wicked habit of shedding great branches when nobody expects it, and this adds a quaintness to the shape of the remaining mass. Sometimes they thus become extremely "shapy," if I may coin a word, and are then excellent material in design, as they present large curving arms and big open spaces that fit admirably with schemes of line composition, and at times suggest them.

It should be understood that no recommendation is made to prefer maimed trees to well-grown ones. Many a poor tree that has been lopped is a sight more for sorrow than admiration; and it may be taken as a truth that a crippled tree is no help to a landscape, and no more a beautiful thing in itself than is a crippled man. The treatment of fine trees when the builder or the ministry of transport comes among them is a profound grief, constant and acute, to the true nature-lover. The form of the elm that has dropped its branches is quite another matter; the process is a natural shedding of limbs that are decayed, and the

resulting shape is always picturesque, just as the lopped, topped, and man-stricken tree is always ugly.

To become possessed of an enthusiasm for the grandeur and grace of trees is to be well disposed for finding like qualities in other objects where they are less obvious. Among the works of man a discerning eye for beauty is equally beneficial to the picture-maker. The old painters revelled in architectural features as important objects in their designs. The Renaissance painters, of course, favoured classic ruins, of which there were many more extant in their time than there are today. And there is nothing statelier than columns and entablatures. Steps, terraces, balustrades, urns, *et hoc genus omnes* came into pictures after the great art revival inaugurated in France by Richelieu and Colbert under Louis XIV. Some superior people affect to scoff at this phase; but I, for one, deplore that it is past, for there is nothing more refining to taste than the classic tradition. Photographers should know their Versailles thoroughly — not as day rush-tourists but as solitary and leisurely prowlers. In the magnificent outdoor sculpture of those gardens there is more delight, education, and inspiration than a lifetime can turn to account.

In England there are the great churches and castles; although ruins do not always compose well if they are very far decayed. But the old stone bridges are always a welcome addition to any landscape. Fortunately hundreds of these fascinating structures of all kinds and sizes still remain that have spanned their streams for many centuries. The more mighty aqueducts and viaducts add imposing effect to the æsthetic attractions of the arch as a principle. When was there ever a person, young or old, who did not feel some little flutter of joy at the sight of an arch? There is so much of interest in it: the shadow under the soffit, with mystery hiding in its depths. In an old arched bridge there is the firm spring of its bow; the gently rising level of its crest from a point perhaps far away on either side; its flanks, sometimes

furnished with buttresses and bays, and sometimes with statues and other ornaments. A bridge is always a center of attraction, even when it is in the distance.

Cottages and houses are largely interesting from association with life and history; but buildings of classical design, gables, Elizabethan chimneys, and the grim plainness of mediæval castles have each beauties of their own in outline and surface. They are all common enough subject-matter; but they are brought forward here as bearing upon the needs of the photographer in fostering ideas of the beautiful rather than of the quaint, the picturesque, or the interestingly antique, in each of which directions he has impulse enough. Fine form has its constant value in all varying effects.

TONAL EFFECT

PHOTOGRAPHY makes her images by light — at least as far as the negative is concerned. We may regard lights as the active agent and dark as the passive. In the fine arts, the opposite method usually prevails; the images are as a rule made by dark marks upon a light ground; the draughtsman drawing the shades not the lights. The chief exceptions to this rule are the mezzotint engraving and the " whiteline " wood-cut in which the work starts with a potential black, and the lights are " taken out." But these are processes for the advanced and skillful craftsman; they are not primitive as drawing with charcoal is. Moreover, the photographer in no way resembles the engraver in mezzotint or wood, as will be shown, because the latter value the potential blacks with which they work from first to last, modifying and heightening tones with the utmost economy of effect, and always counting on the darks. There is no such thing as a high-toned mezzotint. The etcher and line engraver, though they start with white, work with their darks none the less.

The photographer, on the other hand, always seems to think in terms of light. The dark passages are his trouble, and he tries to light them up. Perhaps it would be pictorially advantageous if he could bring himself to think of the darks as primarily instrumental in giving the picture; he would then be nearer the footing of the graphic artist. It would certainly be a new method of approach for him, and might be an emancipation from one or two technical obligations that are gratuitous from the point of view of the picture-maker.

True as it is that light reveals form, since without light we should

see nothing, yet the delight we feel in monochrome pictures is due as much to what the light leaves alone as to what it shows: in other words the delight lies in relative darkness and lightness of the parts.

The picture's design must therefore ensure this delight to the spectator or it will be artistically unemotional. Hence the need of attention to chiaroscuro, which, by the way, is a principle not confined to monochrome art, but one of the outstanding features of the great paintings of the past. It resolves itself into two aspects, contrast of tone, and gradation of tone. A picture made up entirely of bald contrasts would be as uninteresting as the silhouettes of our still-life group in Fig. 4. Similarly a picture all gradation and no contrast is not only uninteresting but scarcely conceivable, because gradations may be opposed to each other. If two " wedges " of tone — graduated scales — be placed head to heel, they will give contrast at every point, except perhaps at one point in the middle of both.

The lower cut on Plate 64 gives an idea of a scheme that has been a favourite for centuries. It comprises the utmost tone mc ' ·'ation by opposing an area of steady gradation to one of broad and level .one, which may be either dark or light. Such a scheme not only sets up contrast between dark and light, but the further contrast of level tone as opposed to gradation. In the picture by E. Wragg, " Light and Shade," the principle has been very ably made use of (Plate 48). Some such application of these factors exists in all good pictures, as anyone may prove by seriously studying fine engravings and etchings. That study is a necessary part of the photographer's pictorial education (though, unfortunately for him, he seldom seems to think so), since it demonstrates what endless possibilities exist in the interplay of light and dark areas.

Amongst other facts worthy to be noted in the study of engravings and etchings would be the important one that the finest results are due more to effect than to pattern. Effect is not an easy thing

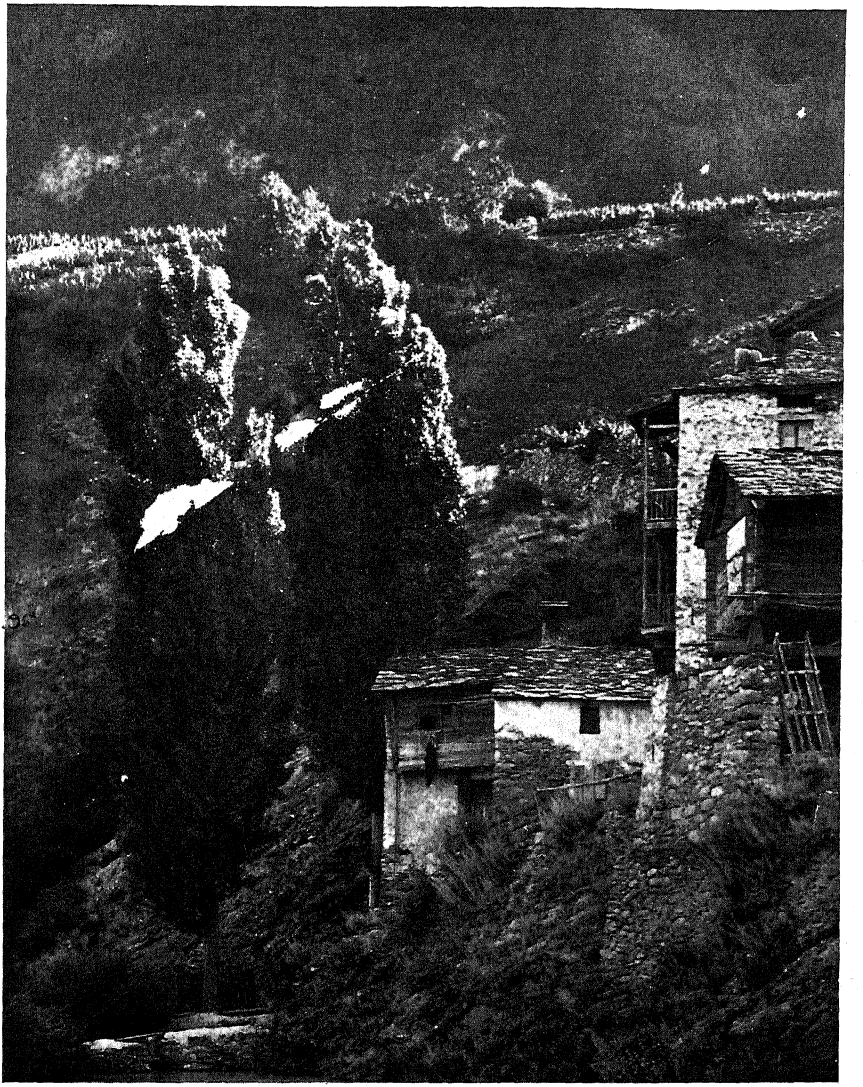
to describe. Perhaps it really signifies a particular appearance, as opposed to an ordinary appearance, of objects or scenes under some special scheme of light and shade: what one would call a very *effective* light and shade. But the term extends, of course, to any effective appearance, not merely to the result of illumination and its cast shadows. More correctly it may be described as a telling condition of brightness and gloom due to the way the light falls fully or sparingly, fiercely or mildly, directly or by reflection, on surfaces that are plain, curved, broken, or smooth in various parts of the picture. In all this, gradation is equally as operative as contrast. When pattern is forced by contrast alone the result amounts to no more than the bald statements of a "modernist" poster. Although nobody could escape the telling pattern of "A Greek Temple" (Plate 8), it is undoubtedly in the dramatic effect so ingeniously given by Alexander Keighley that the success of the picture lies.

Pattern, by the way, is perhaps occupying too much attention today, to the detriment of effect. The two things are often antagonistic. For example, if the pattern is extremely pronounced it is necessarily so by reason of the fewness, the flatness, and the intensity of the tone areas; and this may easily develop into a commercially-inspired virtuosity. But effect, as the pictorialist understands the term, does not come about by those means. "Spring in the Swamp" by E. A. Delcroix is a fascinating thing (Plate 49). But why is it so? Not because of its delineation of trees and lianas, for the diffusion is against such a record of facts. The fascination lurks in the creeping light contrasted with the dark stem; a condition from which we gather perfectly the influence of such a mysterious place upon our mood. But effect is, of course, not confined to landscape. Figure subjects and architectural pictures are made or marred by it. On the stage, in the cinema, and even in shop windows, effect is the saving grace, the trump card that wins.

Much perplexity may arise for the aspiring pictorialist from the fact that there are two entirely different ways by which contrast and gradation are regarded, and by which their pictorial value is to be judged. To the technician in photography contrast and gradation are qualities of the negative, by which the print can, if desired, show a long scale of tones; and by which *each object* represented will reveal a delicate transition from dark to light according to its modelling and illumination.

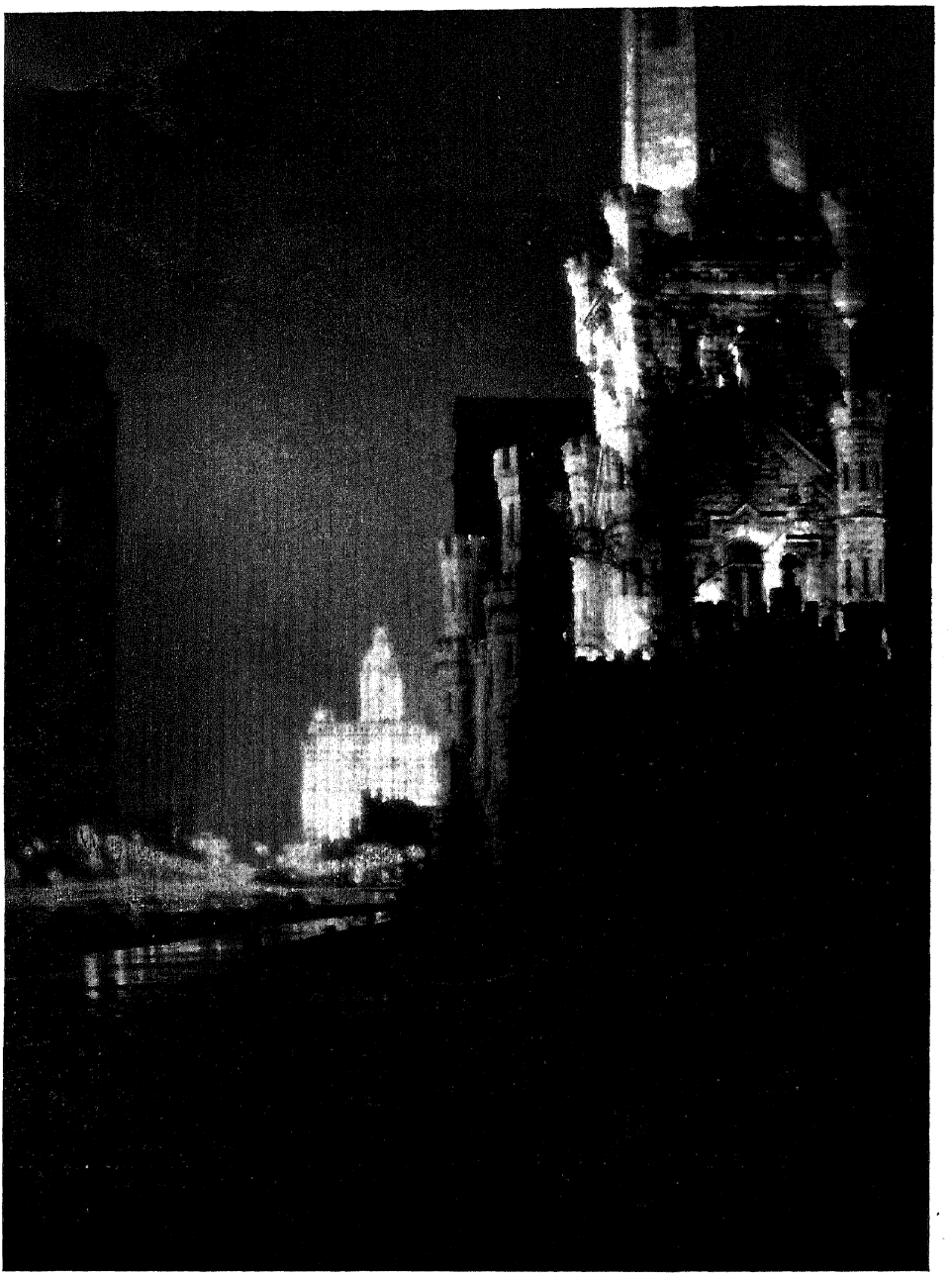
Looked at from the point of view of the picture-maker — who, of course, is very frequently the technician ewise — contrast and gradation have little, if anything, to do with separate objects. It does not matter how flat conditions may make the various incidents. What is important is that there shall be incidents ranging from the lowest to the highest notes of the chosen scale, as simply stated as may be. The whole picture will be regarded as a *single thing* requiring its own highest light and deepest tone. If whatever comes between these extremes is marshalled into a proper system of diminuendo and crescendo, then the comprehensive gradation of the picture is secured. In short, the pictorialist must learn that, in spite of all minor truths of record, if he take care of the whole, the parts will take care of themselves.

An expansive landscape, in which everything is in obvious recession, thus entailing gentle graduations of tone from far to near, will possess homogeneity, and reveal, like many works by Claude and Turner of this description, a kind of beauty entirely its own. It is the beauty of a single object having its own proper gradation. A picture comprising large, near, important objects will offer another result; not one of homogeneous gradation, but of variety of tone; one area of tone being contrasted against another. Its near and foreground objects will catch and obstruct light in broader areas, just as they do in U. S. Johnson's print "On a Sunny Afternoon in May" (Plate 50). This kind of



AT THE FOOT OF THE SIMPLON — Frank R. Fraprie

PLATE 34

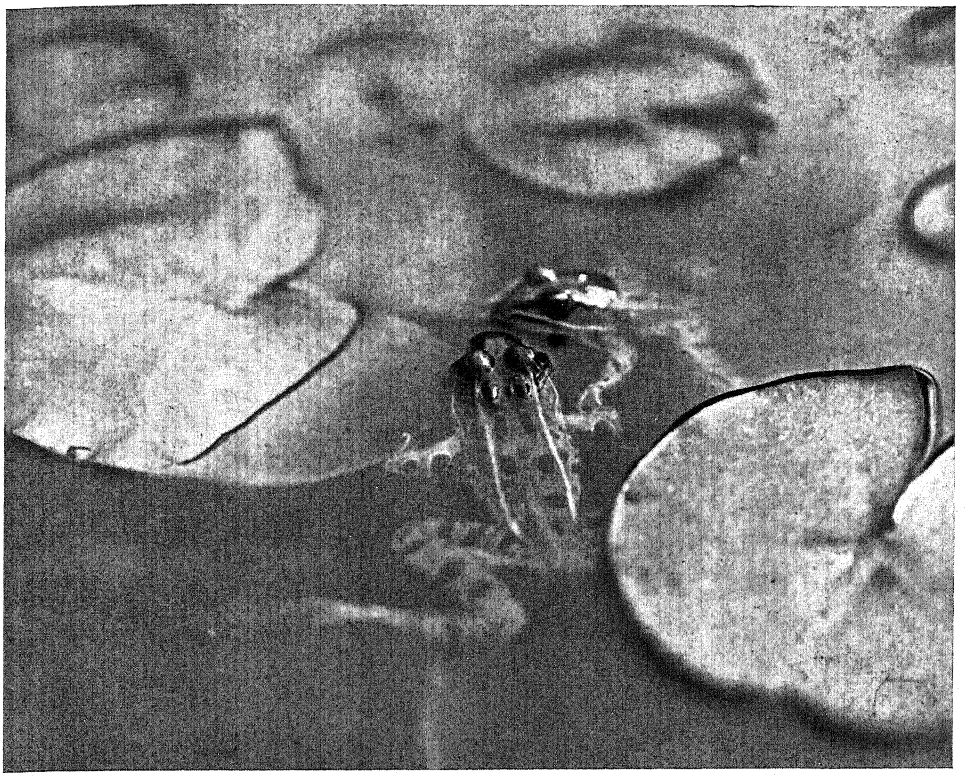


CHICAGO — A NIGHT IMPRESSION Chas. Clayton, Jr.

HARPS OF ÆOLUS — Francis O. Libby

PLATE 36

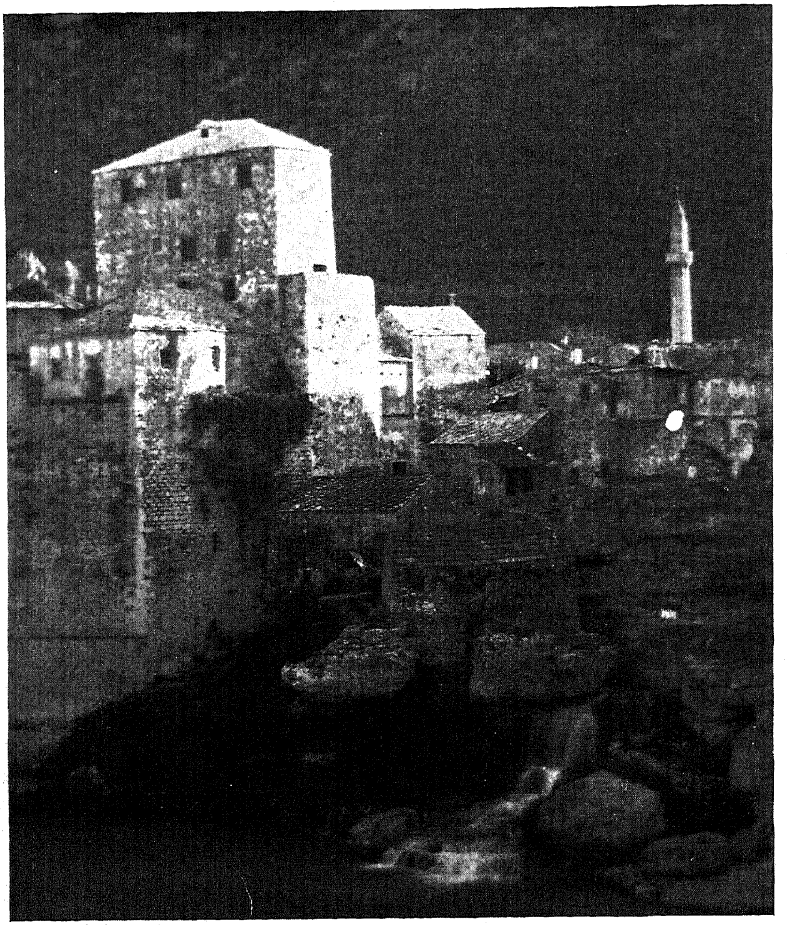
A Corner of the Garden — Hideo Onishi



A FROG HE WOULD A-WOOING GO

Walter Rutherford

PLATE 38

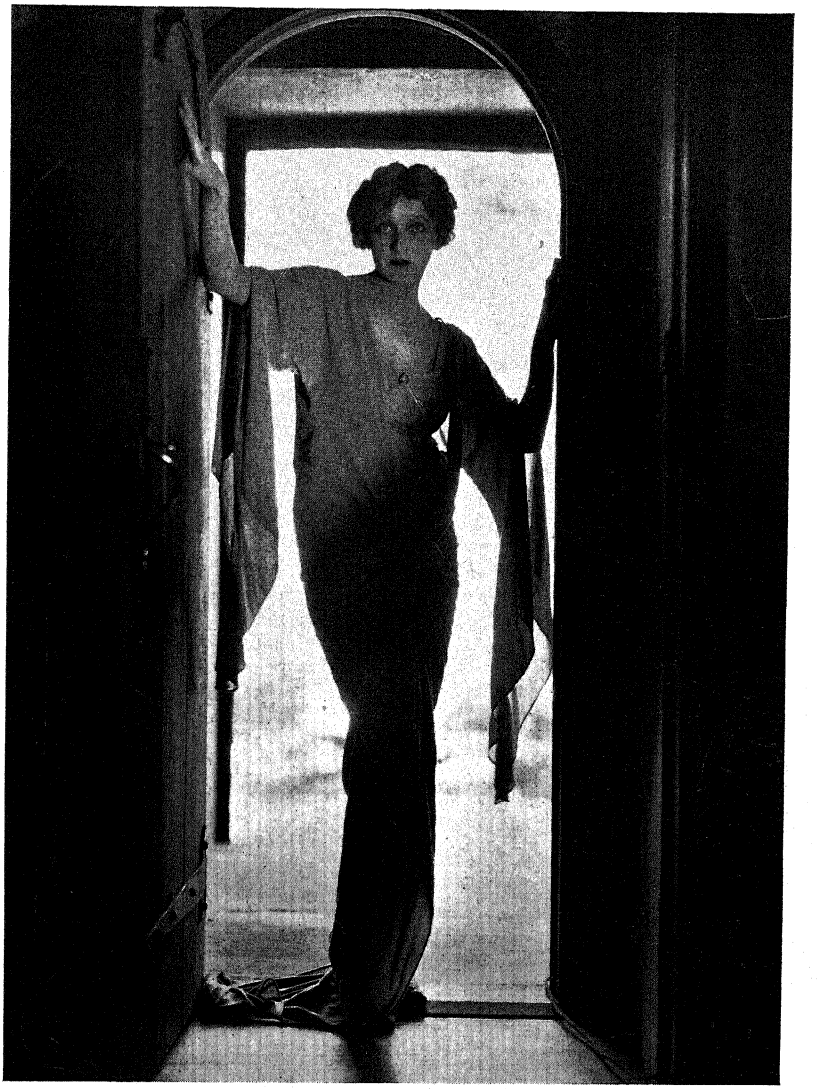


THE OLD CITY OF MOSTAR — Clara E. Sipprell

VENICE Victor Kammerer

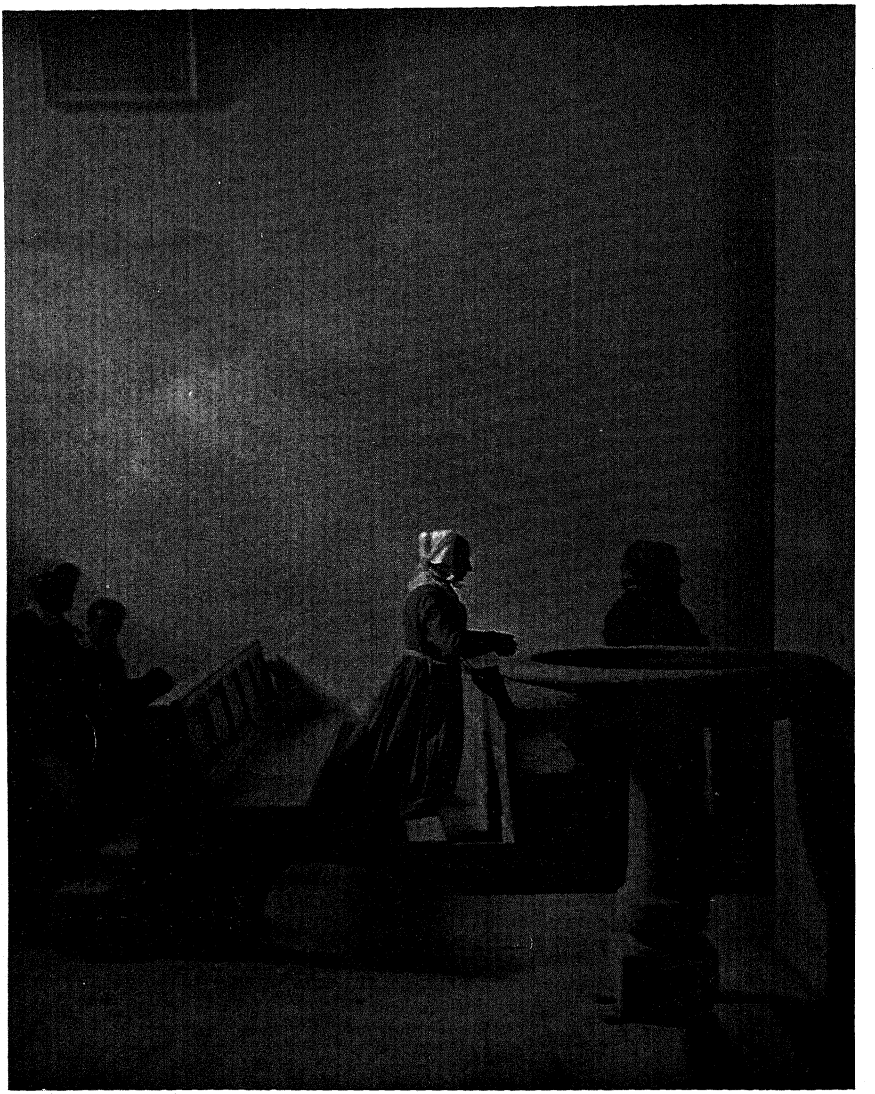
PLATE 40

PEACE — Edward D. Mudge

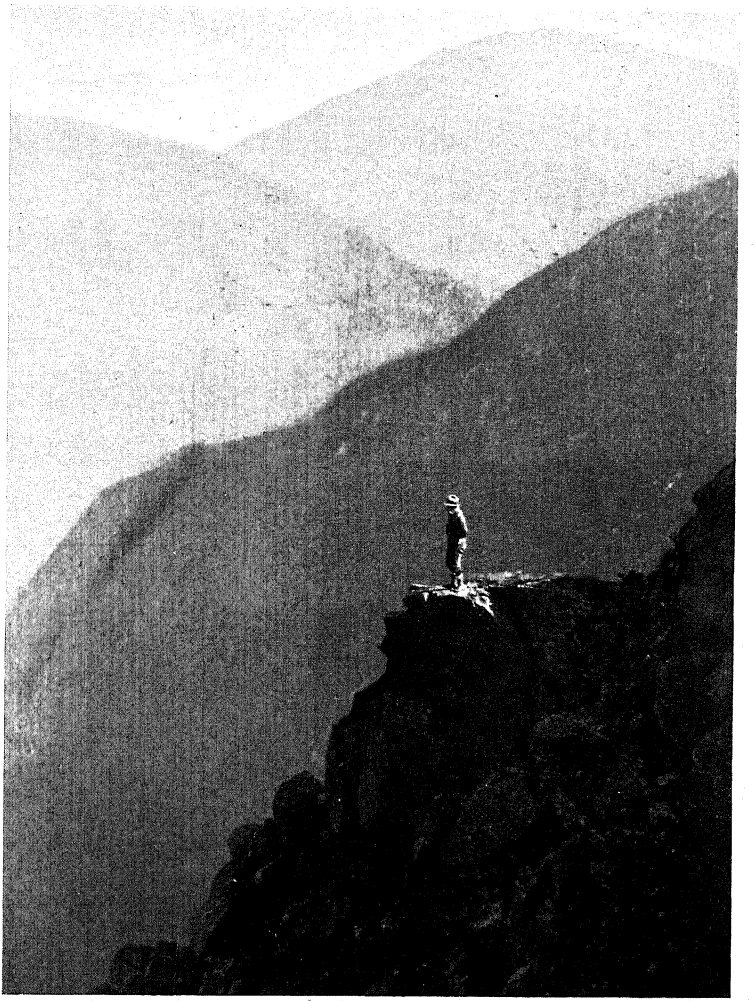


GIRL IN DOORWAY E. G. Dunning

PLATE 42

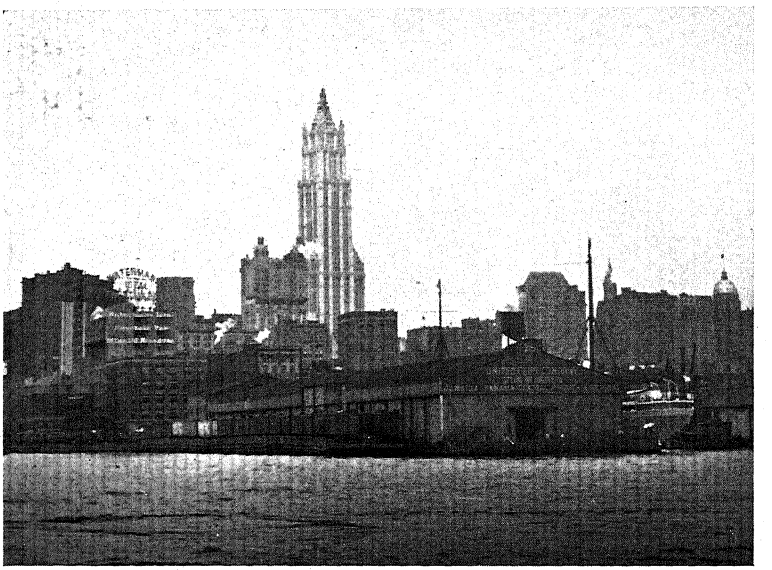


LIGHT FROM HEAVEN — Stefano Bricarelli

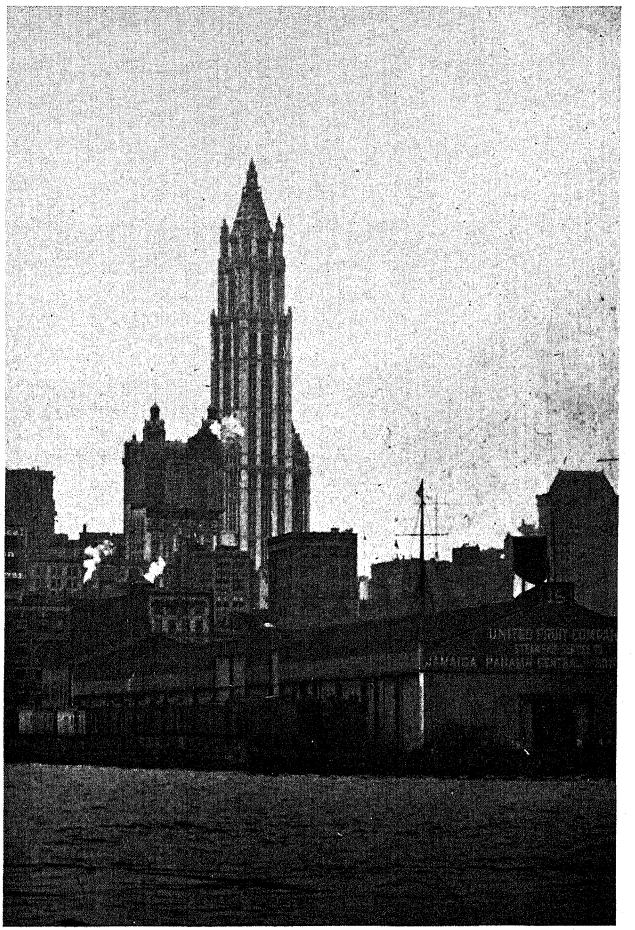


PEAKS AND RAVINES — Rupert S. Lovejoy

THE WOOLWORTH BUILDING Wm. S. Davis

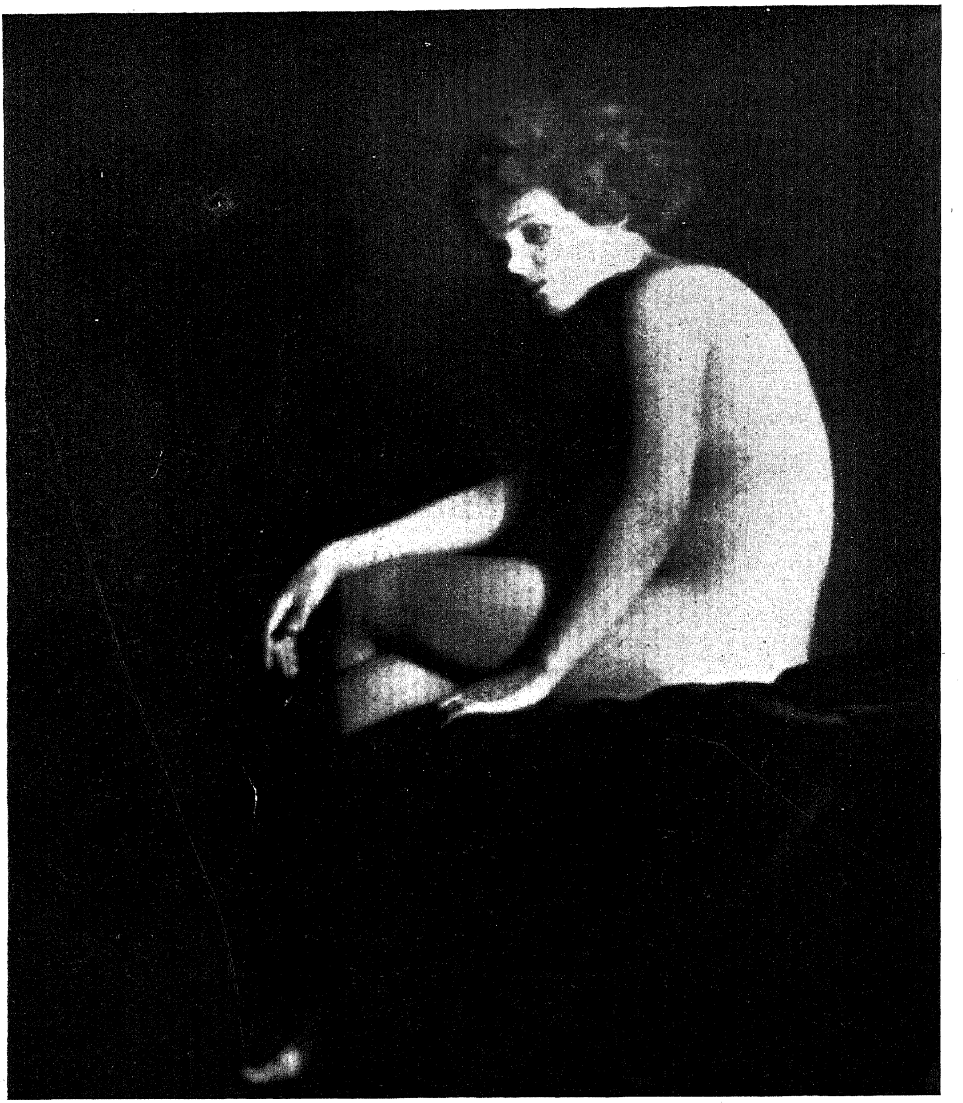


THE WOOLWORTH BUILDING Wm. S. Davis

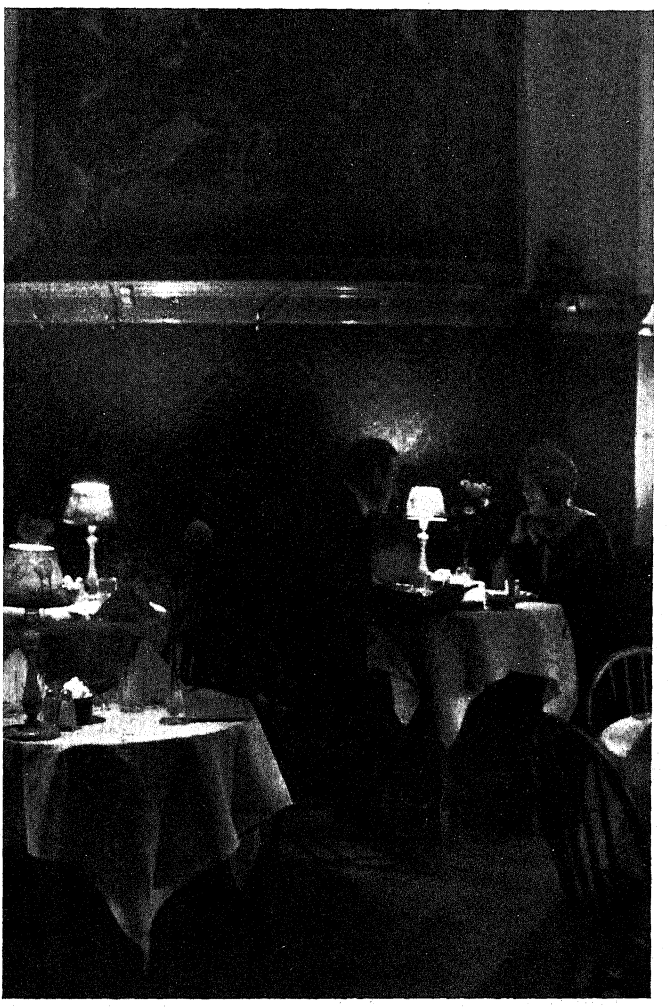


THE WOOLWORTH BUILDING Wm. S. Davis

PLATE 46

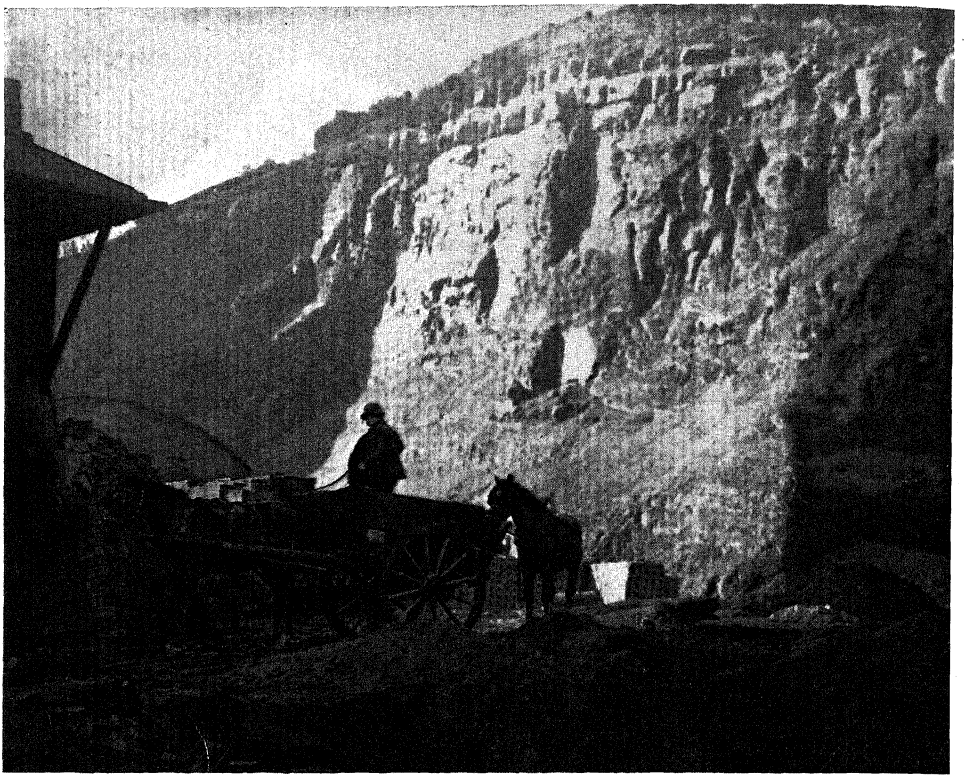


MEDITATION — Herbert B. Turner



THE ONLY TWO — Johann Helders

PLATE 48



LIGHT AND SHADE — E. Wragg

picture is no better and no worse than the other: it is merely different; but it happens to be much more characteristically the photographic picture-maker's choice. Both ideas, however, can be combined to great advantage. Foreground objects may be strong and imposing, while any expanse seen through or beyond them may be as delicately gradated as in a work that comprises only a far-reaching expanse. To sum up, the artist must keep in his mind an idea of general gradation, even if some intermediate stages are dropped out. That is to say, pictorial gradation must be thought of as something operating from near to far over countless vertical planes, not as something operating only in the details of each separate plane.

FACTORS IN EFFECT

Effect in landscape is largely the result of weather conditions. It is at its best in changeable climates like that of England; and that is why English landscape painting is so rich in the dramatic phenomena of sunshine and cloud-shadow in operation at once. A constantly sunny landscape is less exciting than one wherein the low clouds throw a clearly cut band of rich shade across the gleaming area of sunshine. To see hills, buildings, and tree-groups, towering in shade against a sunny background of land and sky, is to feel that insistent desire to portray which goes by the name of inspiration.

But photographs of such effects do not seem to be plentiful. Leonard Misonne's "Approaching Storm" gives an idea of what I mean, and "Hochland" by Alexander Niklitschek certainly deals with sunshine and cloud-shadow in operation together. But the stormy nature of both these works is opposed to the joyousness of the effect under discussion; the over-dark sky of the latter particularly so, to say nothing of its small proportion of sunshine (Plates 51 and 52).

The tonal effects due to mere light and cast-shadows of constant sunshine conditions are, of course, available everywhere; but they are a different kind of display from that of the shade of passing clouds.

In capable hands they can be made to give intense moods. The splendour and grandeur of nature in these conditions are very sensitively rendered by Clark Blickensderfer in " Evening at Timberline," which is made up of clearly contrasted areas, and yet is wealthy in gradation and variety (Plate 53).

In the less remote scene of city life Charles Lederle demonstrates by his picture entitled " The Call " how far pictorial charm can be secured by the lights, greys, and blacks caused by smoke delicately modulated and brought into contrast with a dark accent such as is afforded by the vessel in his print (Plate 54). Mists, steam, and smoke are well appreciated by photographers as mediums of pictorial effect. Sometimes the very flatness of their local tone, without much modelling by direct lighting, seems sufficient for pictorial purposes. Such conditions evidently inspired William H. Zerbe in his fire-brigade scene, " A Three Alarm," in which smoke supplies a large field of grey tone, similar to that of the sky, for the relief of the darker tones that culminate in the excellent group of firemen. Thus with conditions that only just escape an effect of flatness, we get tonal effect and a fine pattern as its outcome (Plate 55).

EFFECT BY LIGHTING

The beauties of lighting are secured in identical ways whether the subject be landscape, portrait, architecture, or still-life — it is always a matter of gradation and contrast. The lighting must reveal the special character of the objects. If it muddles the shape of things, so that we are at a loss to infer what are the contours of certain objects partly hidden by something else, then the lighting is not happy.

Lighting may reveal a shape in two ways; by bringing out its whole mass flatly, as in silhouette, or in bringing out its roundness and modelling. It chiefly acts in the first way when it is behind the object, but if it is directly in front there will again be more of mass and outline

shown than of interior modelling. The picture by Clarence H. White, "The Bath Room — Morning," shows the silhouetted effect flooded by reflected light which is thrown back on the figure and the window-frames. Being much diffused, the reflections add nothing to the modelling but only still further flatten the effect and raise the whole tone to a very high key (Plate 56).

The flat effect can be very impressive, for it is necessarily simple; and in landscape it borrows some credentials from dawn and sunset. Nevertheless, it cannot really be regarded as so fine an artistic expression as the lateral lighting which reveals much more of the characteristics of the objects. Light upon the front of a thing gives a less beautiful effect than the light behind, because it leaves nothing at all to conjecture: it does away with mystery, and mystery is one of the qualities that stimulate emotion. All that lies in the flat shape of an object lit from behind is matter for imagination. We know that much is there, yet what it is we cannot see, but the fancy is stirred. In the opposite effect of a front lighting, although there is almost as much flatness, it is flatness devoid of mystery. Certain details are thrown at us, so to speak; but the amount of depth of the receding parts and the amount of projection of prominences are not made easily evident, with the result that the complete object is scarcely more elucidated than it would be with the light behind it.

But there are two exceptions to this sweeping generalisation in reference to front lighting. In portraiture the method has been admirably used in rendering the psychological traits of a sitter. At a first thought one would say that the side light with its efficient rendering of structure would be unsurpassed for portraiture. But the truth is that in the human face we are not in need of the chief essential facts of structure. We all know the general modelling of a face. The facts we do wish to learn about are the more delicate refinements of modelling which life has stamped upon the features, and these a more frontal

lighting reveals far more subtly than does the side light which leaves the face half hidden in shadow.

The other exception is in landscape. There are times when the weather conditions afford a kind of glorification to objects in full face of the light, especially when relieved by a darker sky.

The rarer and more dramatic effects of cloud and storm certainly play into the hands of art and capture the mind that is indifferent to the calmer and more constant beauties of nature; but the real nature lover (that is to say the person who observes principles of beauty in nature, not "collection specimens") has no need of special attractions or uncommon displays. For him the side lighting elucidates structure; emphasises the third dimension of things — their depth; it shows the rotundity of trees, towers, and even tubs. To see the light culminate upon a spot in such a thing as a tub, and to note how upon the adjacent parts it loses its foothold as the surface rounds away, is, for the enthusiast, the most fascinating operation of the principle of gradation.

If the reader will look at Mrs. Minna Keene's "Still Life" it will exemplify this great principle. The apple and the basket particularly will recall to any mind countless unconscious observations of the *roundness* of things as seen by the exposition of a simple scheme of light. This is every bit as elemental a charm as the display of small detail by photography, and it is of a higher order because it is a charm that recognises a principle (Plate 57).

When sunlight falls practically parallel to a surface it intensifies the roughness and throws out long shadows from the prominences, with a most lively and rich effect. Walls and other architectural features thus gain a quality and virility that the rendering made under a full-front light misses entirely. "In the Shadow of Centuries," by G. H. High is a good if rather extreme example of this crisp effect (Plate 58).

To point the moral of methods in this way and to adorn the tale with example is perhaps to give a spurious air of finality to one's findings. The reader must, if he can, apply the lesson where it is obviously due, and not accept the rulings as generalisations constantly applicable.

Even Mrs. Keene is not always photographing groups of fruit. There is a method for every subject; and every subject involves its own set of basic principles. Near things like still-life subjects, portraits, and figure studies, wherein the beauty of modelling is the theme, demand the exposition that gradation alone can give. They also seem to justify the technician's ideal of gradation in separate small parts, already referred to.

But landscapes, and those figure subjects of which the theme is not beauty of surface, of texture, or of small shape, but a content of more abstract ideas, seem to be better fitted with a broader treatment. The landscape must always appear as a comprehensive *idea,* not as an assemblage of exquisite parts. Its message is spoken in terms more abstract than the message of individual and near objects.

Landscape is a collective essence of things which, themselves, do not proffer separate qualities. At dawn or at sunset this comprehensiveness is most easily seen, because the dominant portion of the sky comes directly into the eye and asserts itself above everything. It is because of the fierceness of J. M. Whitehead's sky in " Ruins — Old in Story " (Plate 11) that the incongruous lighting of all the particularities of the scene becomes merged into a comparative generality, and things do not assert themselves to spoil our enjoyment of the ideal truth that is suggested.

For such reasons the painter looks for the general effect; and the photographer who can arrive at the same mental standpoint produces the finest landscapes.

LANDSCAPE EFFECT WITH A FIGURE

If the reader will forgive an apparent contradiction, he is asked to approve a figure subject that does not answer to the requirements that I have postulated for near objects. The little boy in Mrs. G. A. Barton's touching picture entitled " But what are the voices of birds — but words? " shows gradation only in the face. His hands, his clothes, the basket of fir cones, and all other accessories are signally lacking in gradation; being sharply divided between high lights and deep shadows. This looks like a regrettable demerit, and to the exacting technician it certainly must remain one. But I would submit that a figure out of doors, seated beneath a big tree and catching the sharp beams of the sun that cut into the deep shade, is not wrongly represented in the way Mrs. Barton has elected to show it. The studio presentment of a still-life object or a portrait does not apply in this case. The boy is really part of a scene of which we see but the chief point of interest; and the effect of the outdoor general view is apprehended by this treatment, which is not really that of a close view. It is rather a selected part of a larger view from which we get knowledge of what the general effect was. It is, in truth, a landscape effect (Plate 59).

OF LANDSCAPE SHADOWS

It is not possible to convey in a picture the impression of the difference existing between sunshine and shadow if the shadow is allowed to reveal all that would be seen in it were there no direct sunshine. In the ordinary light of a studio or of a cloudy sky we can see much more in the shady parts than we can see in the cast shadows of strong sunshine. The statement seems unbelievable, since there is so much more light in the latter case. But the reason is easy to understand. There is, of course, many times more light when the sun shines; but our eyes do not record it because we have an accommodating iris in them which shuts up or rather contracts the pupils through which light enters. If

it did not do so we should soon all be blind. The iris works exactly as the " iris " shutter of a camera does, which is named after it. Everybody must have noticed in coming from a very dark place how the light seems to glare in brilliancy, although in a few moments it becomes possible to learn that the light is really not garish after all; perhaps even dull below the average. What happens in such a case is that in the dark place the irides are open as widely as they will go in order to admit every available ray of light. On leaving the darkness and coming into a place better lit the irides have to close up again, so that the retinal nerves shall not suffer over-excitation. But they cannot close up sufficiently quickly to keep pace with one's feet in a short transition. I might here interpolate a warning against quick changes of lighting conditions. The sudden switching on and off of brilliant illumination at lantern lectures is highly dangerous and reprehensible cruelty to the eyes. Of course, the iris works in the opposite way also, as everyone knows when entering a cinema from the street. It takes some time to see anything at all except the screen; and without Hebe's torch we should never know where to find a seat.

In brilliant sunshine our irides close in order to adjust the admitted amount of light. The resulting *sensation* or *impression* of vision is that the shadows are dark and empty, for the amount of light on details in them is not sufficient to impress the retina, unless a special effort is made to do so. If we make this special effort, we can, of course, see a good deal of gradation in the shadows; but when we do not thus scrutinise, but merely receive the impression of the fierce contrast, we see no detail but what lies in the path of the light. A representation on those lines gives the natural impression — the psychological rather than the physical record of bright sunlight. The shadow full of detail belongs to ordinary daylight illumination from which some objects are sheltered.

In landscape work the photographer seems to have a strong predilection for sunlight. It is quite natural that he should. Everybody loves the sunshine, especially in the northern latitudes. Yet it is seldom that the photographer has the moral courage to seize this *impression* effect. He dreads solid shadows. They are considered bad photography even when they are good art. They must be exposed for, which means that they are treated as though they were not shadows. They are made to reveal the inner lights, the details and the textures that they would rightly have in a gentle shade cast by a modified light.

But there is another reason why it is unwise to scorn the empty shadow. In very dry pure air the shadows from bright sunshine are, in very truth, empty; for the reason that no light gets into them. Light in shadows gets there either by reflection or diffusion. The brilliant shadows of oriental scenes where white walls and sandy roads are powerful reflecting bodies are not the sort of conditions under discussion. I speak of those in more northern latitudes where in spite of average humidity there are summer days that are dry and clear in which the shadows are, to the eye, practically black. They are so because the rays are clean-cut: there is no diffusion or scatter to send errant light into places where direct sunbeams are barred. Shadows become therefore so hopelessly dark that they would yield nothing if they were " exposed for " while the camera-man took a nap. On the moon, where there is no air at all, blinding light and absolute black darkness lie side by side in sharp contrast.

The characteristics of a grey day are that objects do not cast any shadows. Their dark parts are simply the undersides of things or the sheltered parts where the light does not penetrate — under rocks, hedges, doorways, carts, and so forth. The shapes of objects are otherwise completely defined in the general light. The characteristics of sunlight, on the other hand, are that the shapes of things are cut up by

beams and shadows in sharply-edged bands. It is a kind of camouflage of light, rendering it difficult sometimes to detach one object from another.

The grey day effect is a very beautiful one and capable of equally strong if calmer pictorial effect. Everything is deepened in tone, but because the observer's standpoint is necessarily in the same half-shade of sunlight diffused through clouds, it does not appear to be shade to him, but merely modified light. Yet the tonal contrasts of such a day are vivid, especially in objects standing against the sky, when they may often appear to approach blackness.

As an example of strong and beautiful effect embodying the principles touched upon above, the picture "From Shepherd's Crag" by John Latham could hardly be surpassed. Its virile strength is due to broad massing of the darks and an unusually long scale of tones. In the print before me as I write they range from absolute white to absolute black. It appears to be a unique case of thinking things out in terms of dark. There is the contrast between the flat and the gradated tone; a natural effect of weather conditions and not an arbitrary one of pattern; well-marked vertical planes all properly gradated in the strength of their shadows by the atmosphere, but not without relief of tone one against the other; and above all there is a fine romantic spirit pervading the print's convincing realism (Plate 60).

The difference between vertical and horizontal planes is always emphasised when no direct sunlight falls upon them; for the diffused light seems to drop from the clouds like gentle rain, taking no hold on vertical things but accumulating on horizontal surfaces. This item of naturalism in effect should not be lost sight of by the photographer. As Mr. Latham's picture shows, it can be as powerful as sunlight and cast-shadow, in which the pictorial results are or may be similar. The darkness of the stems and branches of Herbert Bairstow's "Willows" serves exactly the same purpose as that of the near hill in "From Shepherd's

Crag " in supplying the lowest tones of the scale and forcing contrast for the brilliant parts (Plate 61).

On a day when clouds race across the heavens, alternating shadows on the ground in bands of light and dark, the moving contrasts are exciting as well as vivid. Standing in one of the cloud-shadows we can see easily all its details and gradation. Standing in the passing sunbeam the shadows appear deeper and flatter. Again it is necessary to safeguard these statements by saying that the effects that have been dealt with are those of unscrutinising and passive impression. The camera must not be expected to record such psychological effects: it has no soul: its business is to record physical effects. The pictorialist in photography will never produce really fine landscape until he masters the camera's will and bends it to his own.

The grey day of diffused light owes its fine pictorial tone very largely to colour. In sunshine the difference between light and shade is great enough to give the striking effect, overpowering the less clamorous conditions of colour luminosities. But these immediately take the field when the sun goes in. Green trees are then usually darker than green fields, and similar differences of tone arise from the local colour of all objects.

It is obvious then that effect in landscape has to do with more than light and shade: it has to do with colour contrasts.

MONOCHROME FROM COLOUR

ALL monochrome artists who represent natural scenes are faced with the difficulty of translating the colour of objects into terms of lights and darks. The monochrome artists of older times having, in general, a less keenly sensitive colour-sense than those of the post-Turner era, were content to treat nature rather as though she were not coloured at all. They interpreted the shapes of things almost entirely by their light and shade. A century or so ago there was a school of painting in Germany that esteemed colour as beneath the dignity of form. Their works, practically uncoloured, were, however, classical figure-compositions largely, in which the human characters were regarded somewhat as though they were statues. More modern developments in art overcame this academical obsession, and eventually colour came to be held as an attribute that might at times take first place in the inspirations of the artist. Monochrome methods perforce followed this lead. To-day the best monochrome pictures do not treat natural scenes as though they were carved in wood or stone; they suggest the colour differentiations of nature, or " colour contrasts " as they are called.

Further, in proof that the engravers and the German school of painters alluded to — Overbeck at their head — were, in abjuring colour, flying in the face of its conventional recognition as tone, we find that primitive draughtsmen and children have always had a desire to differentiate colour in their monochrome attempts. The " old men " that children draw usually indicate any striking colour notes in garments and accessories by a solid filling of the outlines at that spot. The picture-maker, therefore, has no need to confine himself to light and

shade in seeking effects that shall appeal to the human mind in an elemental way. He is, in fact, bound to take cognisance of the brightness or dullness of the colours of things in representing nature. Sometimes he may be puzzled to know which of two complementary colours — say a bright green and a bright red — equally light to the eye, should be made the darker; but he can please himself, and nobody will complain. Such problems are not frequently important, and the numberless cases of effective colour-contrasts that can be rendered in monochrome will furnish ample material for pictorial photography all the year round: trees, woods, the dark igneous rocks, and many buildings will afford tone contrast against fields, roads (even tarred roads), hillsides, and always the sky, in a manner that can be turned to fine pictorial use.

The photograph, like the more modern engraving or etching, arrives at its statements of tone through the colour of objects; and it does so necessarily; for it is not the amount of illumination available for photography that settles the degree of chemical change in the plate, but the amount of light which objects absorb and reflect; and this is decided by their colour at the time of exposure. In this fact we have proof of the importance of colour in nature towards the effect and chiaroscuro of the resulting monochrome.

The words above, " colour at the time of exposure," may be a little mystifying to those who are new to this aspect of the subject. All objects are popularly considered to have what is called a " local colour "; but in nature such a thing scarcely exists, because the colour of objects is exactly what it appears to be at the moment, and it is not possible to conceive of anything unaffected by the numberless light influences that play upon it by direct light and by reflection. We speak of green grass, blue sky, red dresses, and so forth, but we do not know what those greens, blues, and reds really are till we see them. It is the mere name or label that is the " local colour " and by it we understand, accurately

enough, what is meant in conversation, and that is the only use the phrase has.

It is really an advantage that photography derives its tone values from colour as well as from light and shade, because it thus brings chiaroscuro more into line with art's advancement. If it were exclusively a matter of illumination and cast-shadows there would be but little relief of tone on a grey day when the sun's light is diffused through thin clouds and makes no sharp demarcation between lights and shadows. But colour causes the effects of grey days to be fully as strong as those of sunny days, for apart from those shady parts where the gently falling light does not reach, as in the under surfaces of things, and the sheltered nooks and holes, there will be other tones that are nothing but the measure of luminosity of the colours of things. Thus trees and undergrowth will generally be dark compared with fields, roads, sandy stretches, and the sky. These differences of hue are more apparent to the eye than are their light and shade on a sunless day.

This question of colour luminosity is a very serious complication in art of all kinds, but in photography it offers particular difficulties. The confusion is worse confounded by the fact that our eyes see colours in certain degrees of brightness, and the photographic plate records them in other degrees. Thus there is no agreement from the very start, and eye-truth has been much suspected and falsified by reason of a profound faith in photographic truth. This has gone on for so long that it has created a bias, an acceptance of photographic standards, and unthinking people will now sooner doubt their own senses than the photograph. This photographic standard of tone everybody unconsciously accepts as a well-established convention, and its difference from actual vision is almost entirely lost sight of, not only by laymen, but by pictorial photographers themselves. We can get used to anything; and we have got used to the wrongness, the darkness and the monotony of the average photograph.

The difficulty is twofold, for not only is there this difference between eye and camera versions of lights and darks representing colours, but there is also the need for monochrome art, in these days, to rely upon a colour interpretation which in itself is a constant cause of embarrassment.

The lesson to the pictorial photographer in all this is that he must acquire by extensive experience the power of judging how dark or how light colours will translate themselves in monochrome; and he must do this while he is freeing his mind from the attractiveness of the colour itself in the subjects before him, as already admonished in these pages. He may take it as a general rule that apart from correction by colour-sensitive plates, warm colours will look blacker than they look to the eye and cool ones will look lighter. The warm colours are those which contain or approximate to yellow and red — the hues of fire; and the cool colours are those which contain or approximate to blue. Green will be warmer or colder accordingly as it is an admixture of more or less yellow than blue. This, of course, applies more to light green than dark; for dark green will be dark in monochrome in any case because it reflects comparatively little light. Purple and violet will be either cold or warm accordingly as they contain more blue respectively or more red respectively; and again, if they are dark they must also be dark in a monochrome version. If the question arises how to contrast an equally dark green and purple, the answer is simpler than A B C. When greens and purples are so dark as to necessitate representation by a very low tone, it is not in the province of monochromatic art to deal with them *at all* as colour: they are far more artistically and pictorially important as achromatic tone.

With high-toned colours the consideration of contrast is a little more tenable. In the old instance of poppies in a ripe cornfield, which may be a legitimate problem to handle, the photographer must appeal to the psychology of the matter, since the physics of it elude him. One

or the other will appear to him as the brighter by the light that falls upon it. He must please himself — as I said before, nobody can complain.

But such questions are rather trifling after all: the main affair is to note how the comprehensive tracts of colour — not the points and details — strike the eye as being generally dark or light.

THE NEED FOR OBSERVATION

The only reason for going into the question at all here is that the photographer may be induced to acquire some visual perception of colour luminosities, and so safeguard himself against falsities in photographic rendering. For, if he is callous he will find himself making pictures that do not recall the thrill of admiration that first impelled him to expose. Those who have taught themselves accurately to gauge the brightness of a blue sky, for example, are very few among photographers and fewer still among laymen. But the layman feels just as keenly that a sky wrong in tone leaves him unenthusiastic, though he may not even know that it is the sky which is at fault. On the other hand the man that knows something of these matters can usually tell what is wrong with a print, and why it does not look natural.

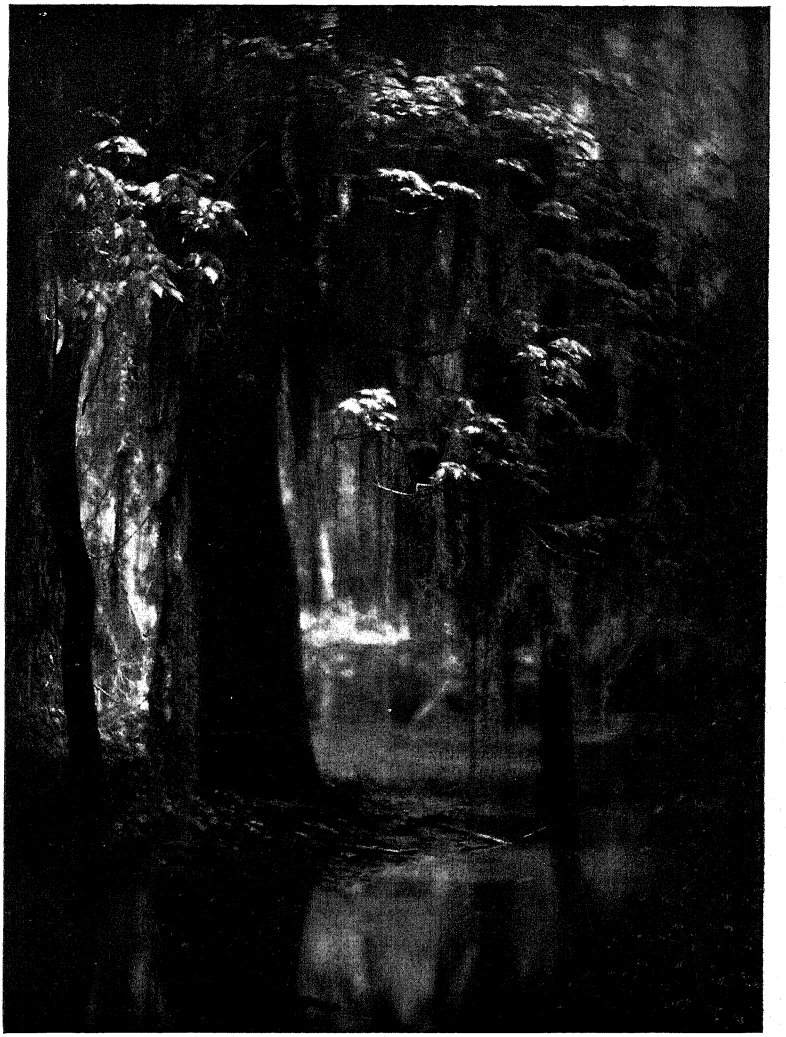
Pictorial photography will never be worthy of any respect at all while its votaries refuse to give themselves any trouble to know the wrongs as well as the rights of both subject and medium. Observation, intelligent and constant, is needed. Trial and tests can be made at all times. Painters do it always, and almost unconsciously, not only when they are painting. Photographers should do likewise, camera in hand or not.

A good way to begin acquiring such perception is to fix the eye on two adjacent areas — of any sort — solid or airy — and endeavour to see which is the higher in tone. Take white houses and clear sky, houses and fields, scarves and wallpapers. Sometimes it will be easy; some-

times difficult. When it is very difficult, a little help or suggestion may be had from gradually closing the eyes and looking through the lashes. The loss of light reduces the colour intensities and leaves more relative contrast in pure tone. But this is only a suggestion. Few good painters regard it as a conclusive test, because it is the *colour* luminosity that should be measured and this varies in a different ratio as the light is reduced; in truth, the colour changes not only in degree but in kind.

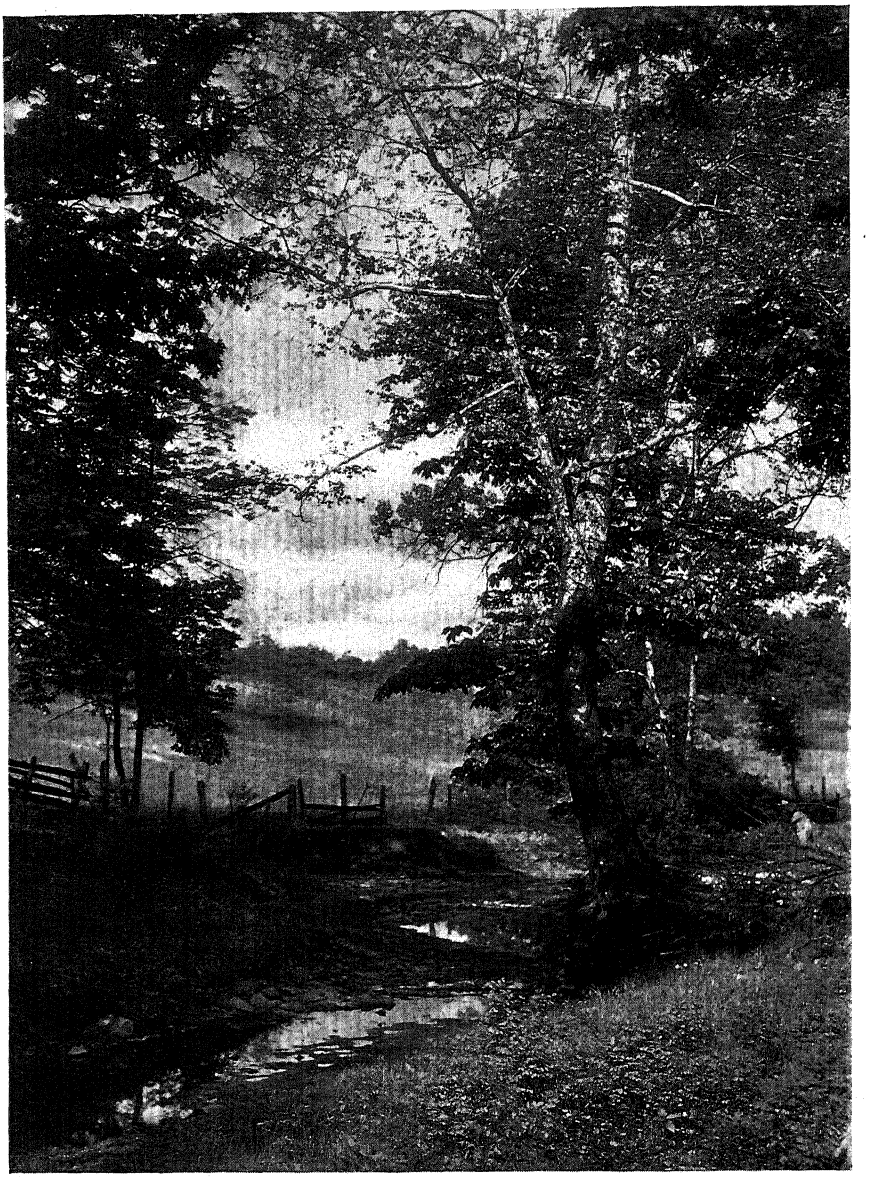
This change of colour with varying light can be proved to take place by observing any fairly spacious areas of contrasting hues. Suppose we take a sheet of blue paper and one of orange, and regard them in a good natural light. The orange will be very stimulatingly brilliant and the blue, if it is a strong blue, will be far less so. Looking at them again in the twilight the orange will be almost a sober brown whilst the blue will be vastly lighter and greyer.

When such phenomena are well appreciated it becomes evident that considerations of tone and colour cannot be divorced in representative art — especially photographic art — without something going wrong. To understand even a little of these problems is to have more joy, not less, in the pursuit of picture-making. It is to know and feel the difference in *quality* of a noonday effect and a nocturne; not only the difference in light. The poetic melancholy of twilight, be it in a wood, in a garden, or in a room, has then a greater significance, and it becomes a delight to perceive such effects and to trace their causes.



SPRING IN THE SWAMP — Eugène A. Delcroix

PLATE 50

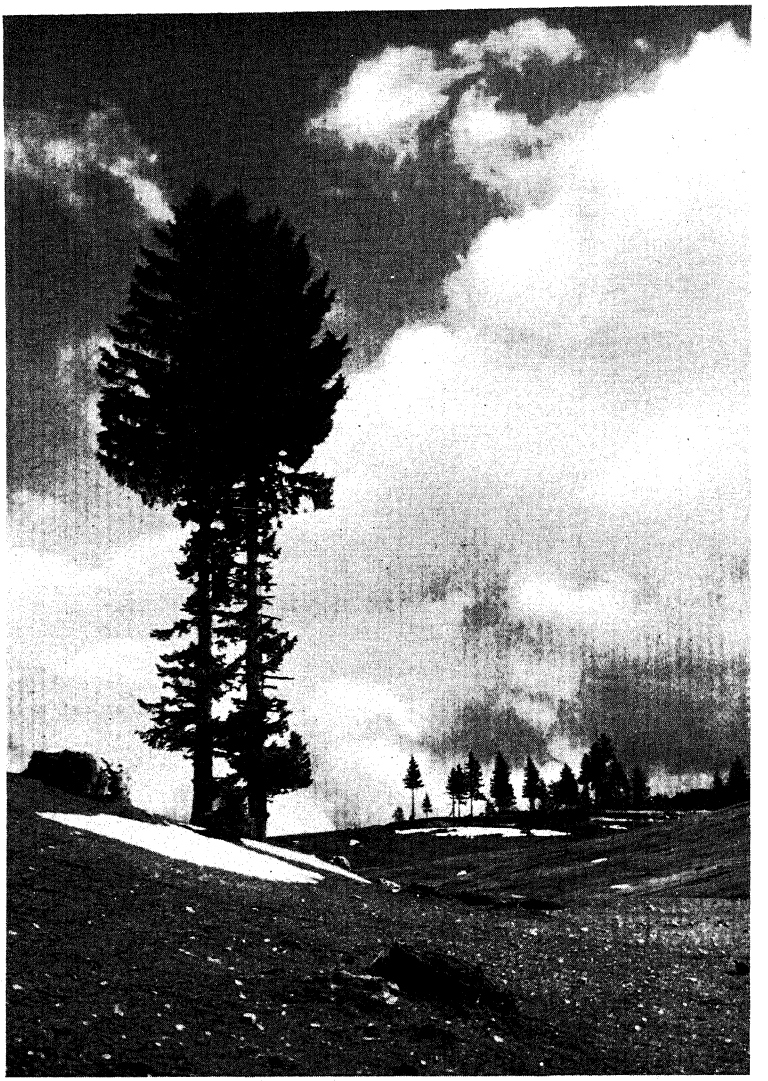


A SUNNY AFTERNOON IN MAY

Copyright 1925 by U. Stephen Johnson

APPROACHING STORM — Léonard Misonne

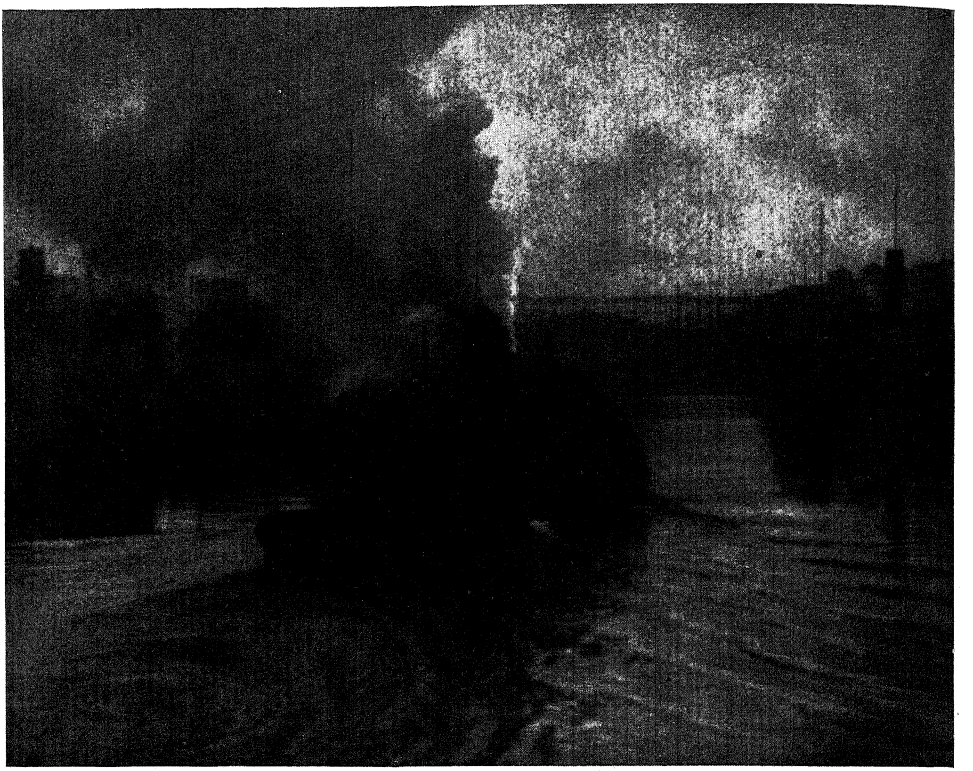
PLATE 52



HOCHLAND — Alexander Niklitschek

EVENING AT TIMBER LINE — Clark Blickensderfer

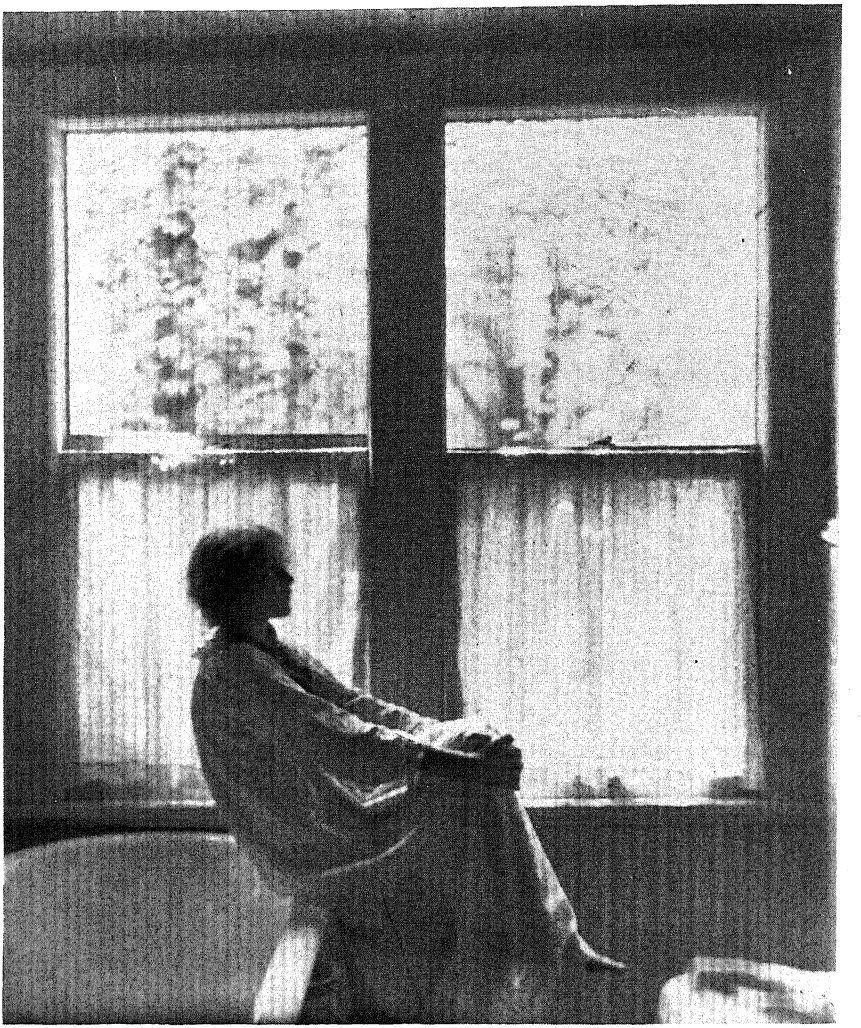
PLATE 54



THE CALL — Charles Lederle

A THREE-ALARM — William H. Zerbe

PLATE 56



THE BATH ROOM — MORNING Clarence H. White

DETAIL, BREADTH, AND ACCENT

THERE is no gainsaying the fact that definition, sharper than that which the human eye can discover, is the outstanding distinction of photography, and everyone who uses the camera as a means of artistic expression is faced with the question whether he is to avail himself of this unhuman characteristic or whether he shall avoid it.

The problem of what is known as "detail," but is really sharp definition, is perennial and inevitable. As already shown, it became a bone of contention seventy-five years ago at the very outset of the activities of the Photographic Society; and it is a point upon which the lessons of the past throw much illumination. The two paths were cogently pointed out by R. W. Buss, a painter who followed Sir William Newton's paper in 1853 by another entitled "On the Use of Photography to Artists." "The whole contention," he said, "sums itself up into these terms: that people of scientific bent desire exhaustive definition, for very good and sufficient reasons, and those without any very covetable bent do so likewise; but people with artistic aspirations are alive to the fact that in its achievement something of more pictorial importance may be lost."

Detail, in itself, is an admirable thing, although it has no more to do with pictorialism than any other quality that is separable, in the various factors that operate in picture-making. Some of the finest works of art in the world are miracles of detail delineation. The real harm of a preference for it in photographs is that it induces many people to despise prints that do not reveal it. When this prejudice in its favour is added to the popular belief that no photograph can be a good picture

if it is not of the high-definition kind, the consensus of opinion becomes an ever-rising sea against which the little broom of pictorialism sweeps ineffectually. It is true, nevertheless, that there are finer beauties than microscopic detail in pictures; and that it is usually deleterious when it is assertive, perhaps the following argument may prove.

Drawing and painting can certainly not vie with photography in the presentment of a complete tale of small detail; but they can do something equally valuable for the spectator: they can suggest it, and this is what photography can do far less well. For the lens either gives sharp definition throughout a certain plane or loses it on every plane. Further this suggestion is in painting easily combined with an actual breadth of effect; but in photography detail and breadth are opposites or alternatives. Therein lies a great dissimilarity between camera art and art from the hand. It requires considerable judgment in selection of subject and of lighting and effect, as well as much skill in the technical processes of photography, to simulate breadth when the image is full of sharp definition. It cannot always be done. To loosen the focus is certainly to bring about a spurious kind of breadth: but that is in reality a makeshift which does not properly meet the case, as will be seen later.

It is scarcely worth while to waste time over the question of extreme diffusion, because it is nothing but a childish abuse of the focussing licence which every lens allows. There is no beauty in a bad case of fuzziness: that is agreed on all sides, and even the makers of such things do not claim truth for them.

But there is all the difference in the world between this abuse and the *juste milieu* of the matter. Steel-sharp and needle-point definition is only the opposite extreme to fuzziness and therefore equally wrong in pictures. It is wrong because nobody ever saw in such a manner with the unaided eye, and it is the average sight of man that must be the standard in art. The eye is an imperfect instrument judged by optician's standards; but its images are beautiful to our minds.

It has been the writer's experience to hear indignant repudiation of very beautiful camera-made pictures on the ground that they were utterly incompetent work; and these diatribes have been supported by examples in which their proud authors have pointed out the perfect depiction of tiny detail (enhanced by a magnifying glass) occurring in the shadows and out of them.

THE PREJUDICE AGAINST DEFINITION

But there is another side to the detail question. The legitimate wish to obviate it in most cases has led pictorialists into a common notion that sharp definition is intrinsically bad. They refer to it as "F:64" disparagingly, and having learnt — that is to say, having been taught — that detail is "finnicking," these apt scholars imagine that they are to hold detail anathema. But this is pure prejudice, like the wine-bibber's hydrophobia of two centuries ago. Water is a good drink and there are times when nothing else will do.

Detail is only bad when it comes in the way of an enlightened pictorialist's aims, preventing opposite or alternative qualities; and it is just as logical to say that those opposite qualities are bad when they stand in the way of a desired sharp definition. Much of the antipathy against detail is therefore prejudice acquired at second-hand. So far has the pendulum swung from the position of the record-makers and scientists that it is now only in the works of a very few of the most artistic workers, who know and feel with originality sufficient to emancipate them from the bondage of prejudice, that reasonably sharp detail is to be seen in advanced pictorial photography.

SELECTIVE EMPHASIS

What is really wanted, but what the lens can never give, is the *selective* emphasis which the eye makes in viewing a scene. The painter can approximate to it very nearly by giving precision of delineation to

any spot in his picture. The lens offers " differential focussing," which limits this emphasis not to a spot but to a plane. But a whole plane is too much. It is quite unlike the visual selective emphasis. This is one of the considerations that sends pictorialists seeking for methods of control which will allow them to pick out a single object for emphasis, not a whole planeful of objects.

On the whole, it seems to me that the best compromise — for compromise it must be — is for pictorialists to favour lenses which will give utmost depth of definition (which we rather loosely call " depth of focus ") in a slightly softened firmness: just that degree of softness that avoids a strikingly hard look in a slight enlargement, and which with the aid of " stopping down " can be rendered clear enough to record all that is wanted in special cases. Less than this will look as unhuman visually as the microscopic sharpness.

SOFTNESS OF VISION

This seeing softly yet with precision is one of those conditions of existence that we all are subject to, yet never recognise unless we are trained to do so. People praise their eyesight — farsight and near-sight — and imagine that they see the edges of things as hard lines. It is one of the first mistakes that the art student has to have corrected. I remember my arguments with my betters when, as an enthusiastic youth, I maintained that I saw the edge of a rectangular object as I painted it — with a clear, hard outline. I was told I did not, and my painting was ruthlessly softened by my mentor's thumb. I soon came to see, by a little thought, that even if the edge had been that of a highly finished steel object of square section it could only be truly sharp to the eye at very close quarters, because the air would have made some difference at the distance of a few feet. If it had been a wooden-edge, worn by usage, it would have looked less sharp at close quarters, and at a few feet it could not have recovered sufficient generality to become sharp

at all. Probably, if there were anyone who really did see things as sharply as an "F:64" photograph all day long all through life, he would be a martyr to headaches. Now, it might be asked why is it that a photographic image can be sharper than the real thing, the atmospheric softening being as actively present to the lens as to the eye? The answer is that, for one thing, "stopping down" removes much of the atmospheric effect by cutting off the less direct rays from the objects; and that, for another thing, as most photographs are smaller than the objects they represent, the reduction of the size of the image reduces proportionately the variations in the edges and surfaces. This is all to the advantage of enlargements. For if the photograph is perfect in precision and clearness the variations ought, theoretically, to come into view again when the enlargement reaches "life-size" and the eye would be satisfied.

PICTURES ARE COMPROMISES

The picture-maker who is a prey to doubts can cheer himself with the reflection that all pictures, whatever their kind, are but conventional representations. It is only possible for the best of them to be really true at one instant or as seen by a person who cannot or does not choose to move his eyes — if any such exist. When this is apprehended, all the fighting and argument about truth to nature, all-over sharpness, accent, perspective, and other mighty trifles that have agitated representational art since the coming of photography, melt away like snow under a hot sun. There is no right; but all is equally wrong, so why worry?

Let us not forget that human vision is a complex business which does not begin and finish in the eye. A man's brain can be touched in a certain spot so as to blind him, however perfect his eyes may be and remain. We are quite unconscious of what is going on in our eyes. Our knowledge of what we have seen is the very much edited and "blue-pencilled" report sent to the brain from the retina. The editor-in-chief is that comprehensive agent the ego, who is served by his sub-

editors, will, desire, temperament, and others; all of them taking only what they want and rejecting the rest of the retinal reports. It is this state of things that leads us to say " I didn't notice " when we are asked to describe certain details of things we have seen; although there can be no doubt that those things were completely enough imaged in form, tone, and colour in our eyes. Herein is the greatest difference between vision and the photograph: the first is selective, the other is comprehensive — or supposed to be.

But let us leave the camera out of the argument for the moment and reason a little about pictures generally. A picture is theoretically the representation of a single instant. Attempts have been made to paint continuity; but it has never been more than a pitiable compromise. Old sporting prints show the wheels of coaches blurred to give the visual effect of the rapid revolution of spokes round the hub, but the same prints show the horses with feet lifted in air; reins and whip and other moving things all firmly drawn as though still. Similarly, primitive painters used to tell stories of saints and martyrs, in which various episodes of their chequered careers appeared at different corners of the same landscape. Nobody objected. The unities of time and place have been little respected since the days of ancient Greek drama.

In all these respects the photograph may be taken to be nearer truth than the painter's picture, which, with the best intentions, could never literally represent the events of a fiftieth of a second. But though photography may be grimly true in this respect nobody wants such conditions in a picture because human vision does not experience such conditions.

The standard of human vision, as I consistently maintain, must be the only truly pictorial standard. And it is because that standard is an impossibility to representations which are flat and still instead of three-dimensional and in motion, that pictures have ever been and always will be nothing but mere compromises conventionally (and

gratefully) accepted. The nearest approach to the human vision standard is made by the cinematograph. That is most convincing in its assertions of truth, though we know it to be the result of innumerable lies. But it is exactly because cinematography is so real in its presentment that it escapes the conventions of graphic art and thus forfeits its claim to be one of the fine arts.

Those who know most about fine works of art and love them best are perfectly satisfied that they are not strictly true, judged either by human vision or by photographic records, but that they are the development of many conventions of civilisation, in co-operation. All the resources of intelligence and feeling that artists have used in the past to compromise between what they see and the best they can do to state what they see, make up the sum of art. It is these resources, these confessions of feeling and emotion, the amazing inventiveness in compromise, that is really the fine art which makes pictures valued. The effort of the artist inspired by beauty in nature to show forth the depth and height of his emotion — that alone, and not accuracy, excites sympathy in the beholder who has felt the same emotion. Sympathy is feeling. Without feeling no picture is " fine."

The compromises of the graphic arts are equally necessary in pictorial photography — in fact more so; for whilst photographic results are still two-dimensional, and the center of vision is still a fixed one, yet there is less place and opportunity than in graphic art for the obvious and condoned departures of imagination and resource.

On the grounds of this argument it may be doubted whether a pictorial photograph could ever rise to the height of fine art except by virtue of this indispensable feeling — the sympathetically evoked emotion of the spectator which is the crowning merit of the artist's painted or printed picture. Nor could a spectator experience such feeling in a photograph except by its adoption of those visual standards by which graphic art has always worked. And therein lies another gulf

between graphic representation and photography which art alone can bridge. It is to be feared that the tyro in photography does not realise how much human vision differs from the photographic result at its technical best. Let us make an attempt to describe some of this difference.

CURIOSITIES OF VISION

Travellers in England will be acquainted with that wonderful compilation, Bradshaw's " Railway Guide," which is crammed with tiny numerals, to read which one has to have good sight, or good glasses and a good light. If I look up a train in this book I concentrate with effect upon the three figures I want, in order that there shall be no mistake. The result is that I can remember the look on the printed page of, say 5.38, but have no remembrance of the figures immediately round about. This is due partly to selection by the will and partly to the sharp focussing of the crystalline lens. Indeed, I find it possible to focus upon a full stop, and even to shift the intensive concentration to the adjoining character.

We have no certain or analytical vision of anything except by this point-by-point method. It may not always be so concentrated, perhaps, as in examining time-tables, but there is not a great deal of laxity in the matter. When we gaze in an absent or ruminative way, noticing nothing, it is by action of the brain, which directing all energy towards contemplation leaves the retinal report unnoted. Doubtless some degree of muscular relaxation takes place in the eye at such a time; but the crystalline lens in any condition must focus *something* while the eyes are open, even though the mind be unaware of it.

Between the conditions of seeing a point such as a full stop and seeing nothing when one is " wool-gathering," there are endless phases from concentrated or particularised vision to relaxed or generalised vision, and these phases are determined by the mental attitude. There is, of course, a naturally keen sight and a naturally vague sight; but that

does not affect the present question of psychological interpretation. The artist's habit of seeing a view *as a whole* — a condition scarcely known to the layman who sees piecemeal — is a habit of the mind, not of the eye, which has no habits: only duties.

Everything noted by the eyes is seen in the point-to-point manner. We look at a far-spreading landscape by jerking our points of focus all over it. And those who study this kind of thing will notice that the eye makes rather wide and clumsy jumps without any apparent objective, unless the mind governs muscular control, as in the case of small jerks from one figure to another in a time-table. But while the eye makes these spurts over a landscape, an inventory of the complete scene is being built up in the mind, and if the interest is arrested by some detail the mind cries a halt, and instructs the eye to focus sharply on that point. For example: suppose we are running our eye over a landscape in which there is a church-tower clock. We shall probably see with enough definition to know that there is a clock in the distant tower; but if we feel we should like to know the time by it, our gaze halts, focussing takes place and we read the time; after which the former less-concentrated vision again takes place.

FOCUSSING

In an argument, then, as to whether or not the definition of a distant church clock should be sharp enough in a picture to enable the time to be read, there is exactly as much to be said for as against. Both versions are true to human vision, and therefore both have equal claims to pictorial representation. The question for the artist is settled only by reference to other considerations. Some, however, might argue that if the definition may be so sharp in a distant church tower why should it not be equally sharp everywhere? Why should we not give the leaves on the trees beside the church tower? The question is reasonable, and there have been pictures painted wherein the detail everywhere has

been so defined. This is the scrutinising vision that travels slowly from point to point missing nothing. But it is not every artist who wishes to give that view. It approximates too nearly to the record, accentuating everything to the degree of accentuating nothing. The picture-maker usually has a point of supreme interest which he wishes to accent, either by tone, or by definition. Should he be using a lens which does not give equal definition over the whole field he will probably scheme his composition so that the incident to be accented comes within the range of the best definition both as regards the field and as depth of view.

It will be readily understood that the accenting of an incident in a view is less in accordance with truth of vision than with truth of impression, because the things that remain in our memory are those which impress us. If we were to draw a picture from memory, a fair show might be made with those incidents of which the mind had taken note, but all else would be more or less cloudy and uncertain. In portraying by photography such a mental version of the original scene, differential focussing would offer some facility, whether by expert manipulation or by the adroit use of a faulty lens.

In portraiture, by general agreement the sitter is presented more forcibly than the background and accessories. To this end differential focussing may be used with good effect if it is not taken too far. Nevertheless portraits were painted by the early Flemings, by Holbein and others, who knew nothing of such resources, and managed uncommonly well without them, finding other means of concentrating the spectator's attention on the head of the portrait despite any competing accessories given with seductive smallness and precision.

But landscape certainly stands in less need than does portraiture of any variation in focussing. Aerial perspective should sufficiently separate vertical planes; and in the clearest weather the eye sees enough to soften definition in the increasing distances. To bring out a fore-

ground object with great precision and back it at a few yards by other objects that look as though made of cotton-wool is to give not an impression but a " stunt." It is not like anything the eye could see in similar conditions of scale and distance, and therefore it is not like nature, and not being like nature it is not pictorial.

It is doubtful if photographers would ever have adopted such extreme measures had they not been " picture-vain " and disposed to imitate crazes and fashions in art in the hope of being credited with the æsthetic perspicuity which the craze-painters claimed for themselves. The fuzzy background is constantly on the ground-glass screen. There is no reason to seek it: the job is to get rid of it. Photographers who plume themselves upon doing what painters do had better found themselves upon styles that have not proved ephemeral.

On the one hand, then, we have as means to pictorial ends diffusion and a sharp accent; on the other " all-over " sharp definition; and between these extremes lies the middle course of wisdom, such as was taken by painting in its finest periods. It is a method that gives everything with sufficient firmness to be intelligible on its own merits, and yet admits of some prominent interest being stressed, with more reason, by resources of design and lighting. The Venetian painters gave their great scenes, their wide angles, their depth of field, and their wealth of incident and detail with a fine bravura and freedom of handling, so that a close view revealed only positively essential touches. Yet from a point where the complete work could be seen as a whole, it presented a mass of forms crisply defined. Its detail emerged from well-directed suggestion. With the early Flemings, on the other hand, there is nothing lost by going very close and even using a magnifying glass. In the former class of work we are stirred to admiration of the freedom and nobility evinced by men like Tintoretto and Veronese: in the other class, to wonderment at the exhaustive craftsmanship of Van Eyck — that is the difference.

The photographer may emulate the methods of the earliest painters in giving precision and intricacy which draw the eye of the spectator closer and closer, but he can take no credit for this beyond what is due to the competent use of his means — there is nothing psychological in it. He may also emulate the breadth and bravura of the later masters which involved a kind of magic in making things look right at a certain distance which were wrong at a close view. But photographs are not large enough to justify such attempts, and it is not feasible that we should have to retire so far from them in order to make them " come together " as to put them beyond the range of comfortable intimacy.

On the whole, therefore, it would seem that photographs are at their best in these respects when they have definition enough to enable every part to tell its tale at a convenient distance for a view of the whole picture, any accenting or concentration of interest being left to the agencies of composition and chiaroscuro. In O. C. Reiter's picture " Beside Still Waters," it will be seen that the dark notes of the cypresses are emphasis enough in the composition. The eye is drawn to them through the means of tone and design, not through the means of sharpness; although it might be demonstrated that the foreground planes are much less well defined. This is precisely as it should be: one would not be absorbed in the near grass in such a scene but in the cypresses. Sharp definition in the immediate foreground of this subject would be a pictorial error (Plate 63).

The advantages of such moderation in methods are: first, that there is no embarrassment, by what looks like nonsense, before the eye and the mind of the spectator have adjusted themselves to the photographic conditions. Next, a picture consistently focussed is of the kind that repays leisurely examination at all parts, as though it were an actual scene. And this permits of general and lasting pleasure, whereas the pleasure derived from interest confined to one spot, the rest being

nothing but nebulosity, is rather fleeting. The nebulous paintings of certain impressionist painters have been at a loss in necessarily foregoing that long contemplative delight that landscape done in the Dutch tradition unfailingly affords. The first and greatest truly impressionistic painting, Turner's "Rain, Steam and Speed" is the brilliant exception to this general rule. Its distance is misty by reason of the rain, but not nebulous; for it is painted with deliberation, and emerges into firmness as one looks at it. The engine has looseness of drawing because it thus gives the impression of a rocking, oncoming motion, but the funnel remains the sharpest accent in the picture, and holds the eye.

The general softness given by discreet use of a soft-focus lens of good make is not wholly destructive of firmness. There is much to be said for this instrument. It avoids the biting sharpness that is beyond human vision at any time. The soft-focus lens also seems to eliminate some of the mechanically sweet and infinite gradation of small forms, giving instead a broadening and separating of the structural planes of objects. It renders gradation more as graduations. But all these qualities tremble on the dividing line between use and abuse.

FOREGROUND AND DISTANCE

THERE is so much that needs to be said on the subject of foregrounds in addition to what has already been advanced regarding selection and point of view that a separate section seems inevitable.

A photograph does not depict the nearest part of a scene in exactly the way that the graphic arts would have depicted it before the invention of the camera. As a general rule, it will be found that photography gives greater importance to the nearest parts than the painter did. The painter's method was almost invariably to look beyond whatever was very close, choosing a point further afield at which to fix the limit of his foreground. The photographer, on the other hand, includes all that is within a few feet of the lens. Moreover the camera records this immediate foreground on a larger scale than the painter would have employed, had he — as very occasionally he may have done — chosen to include objects so near his feet.

Perhaps the reason for this difference in method may be traced to the fact that the proportionately large scale of near things induced a wrong idea of their pictorial importance in the photographer's mind. They must have commanded much respect by their size, their intensity of color and contrast as his eye viewed them upon a focussing screen. When the broader aspects of pictorialism were less well understood by the makers of camera-pictures it may not have occurred to the photographer that the big and vivid things were, after all, perhaps of secondary importance. This being so, he would think that they constituted the true picture, and that all beyond them was mere background.

To the graphic artist of earlier days the foreground of a landscape

was a foil — little more — to the near middle-distance where the real picture was located. In his pictorial economy the foreground was frequently no more than a mere strip of dark tone, useful in throwing-up the brilliancy of the true subject; or it was a rather flat and negligible passage to represent space: a kind of threshold to the chief interest. Only after the advent of photography did very near objects begin to be more generally accepted by painters as important parts of a design. This was due to a gradual familiarity with the new aspects brought about by photographic representation. But those painters who had sense of style enough to feel that the old masters were right in avoiding a violent difference of scale in objects, held to the traditions. Certain others, to whom a " modern " way is always the only way, have rather recklessly adopted extreme variation in scale. These have been, for the most part, the so-called " decorative " painters of recent times, and those engaged in commercial designing. These artists quite gratuitously assume that the photographic aspect is more fitting for their ends than the more consistent range of scale of the old masters — who were nothing if not decorative — and of their admirable disciples of more recent decades. Leighton's frescos at South Kensington preserve an admirable relationship in this respect. But apart from decorativeness *per se,* it is in regard to equable scale that James McKissack's " Venetian Waterway " agreeably recalls the shipping scenes of the Dutch masters. This photograph is free from any foreground aggression that would detract from the real theme. Its placid stretch of near water is the threshold over which the eye passes to the position in the view where scale becomes harmonious (Plate 10).

In the art-education of clubs and societies, by which photographers have almost exclusively learnt their pictorial principles, there has not been much of the wider art-culture. Photography has largely imposed its own conditions, and one of the tenets of camera-art has been " you must have your foreground object " — as though it were a thing likely

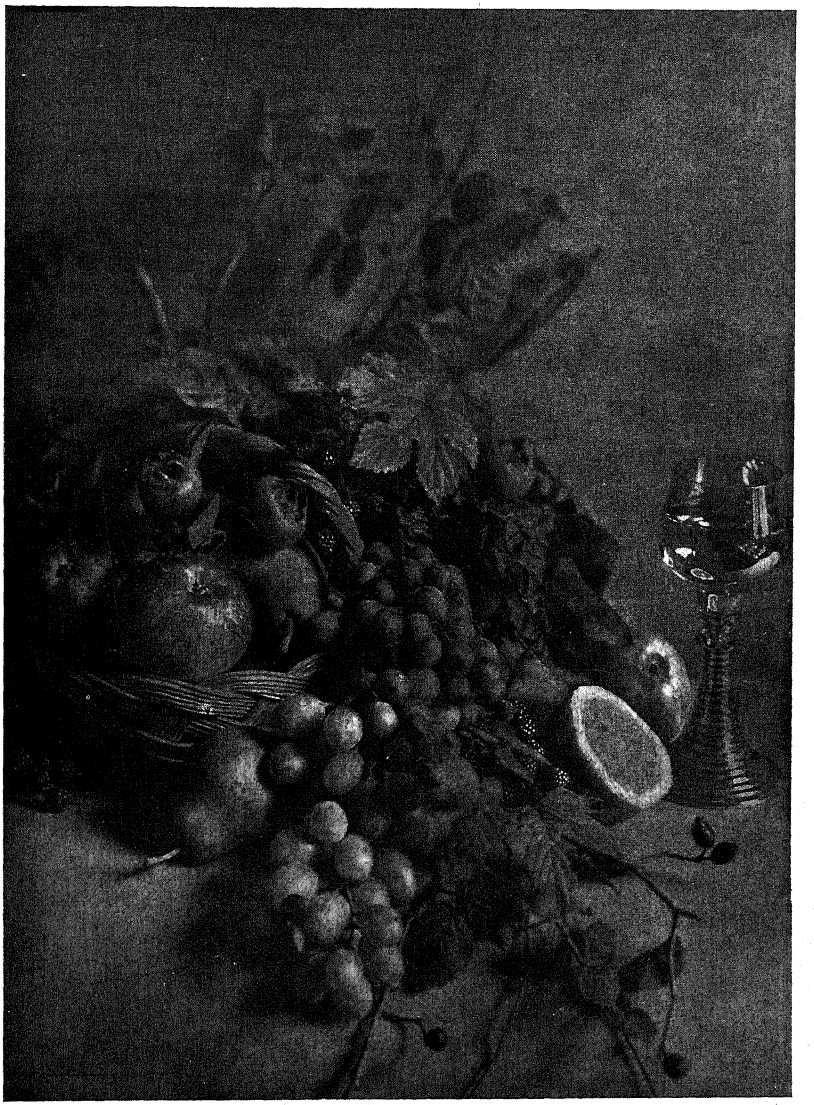
to be left out. As a result of this schooling the camera artist has never been induced to consider the advantage of eliminating the foreground offered him by the lens. His anxiety has been to treat it with the respect he believed it deserved both in regard to focussing and to exposure.

It would be incorrect to say that trees, rocks, and other inanimate things have never appeared in the immediate foreground of traditional pictures. Examples could be named where this has occurred with admirable effect. But a tree or a rock may be of any size, practically, and great variation of scale would not challenge wondering comparison. It is otherwise with human beings and the lower creatures. If these appear to belong to different species the spectator must needs find the comparison embarrassing, for the simple reason that no man or animal ever seen in nature has appeared to him to be anything but its normal size *however close to him it may have been.*

DEFINITION IN PLANES

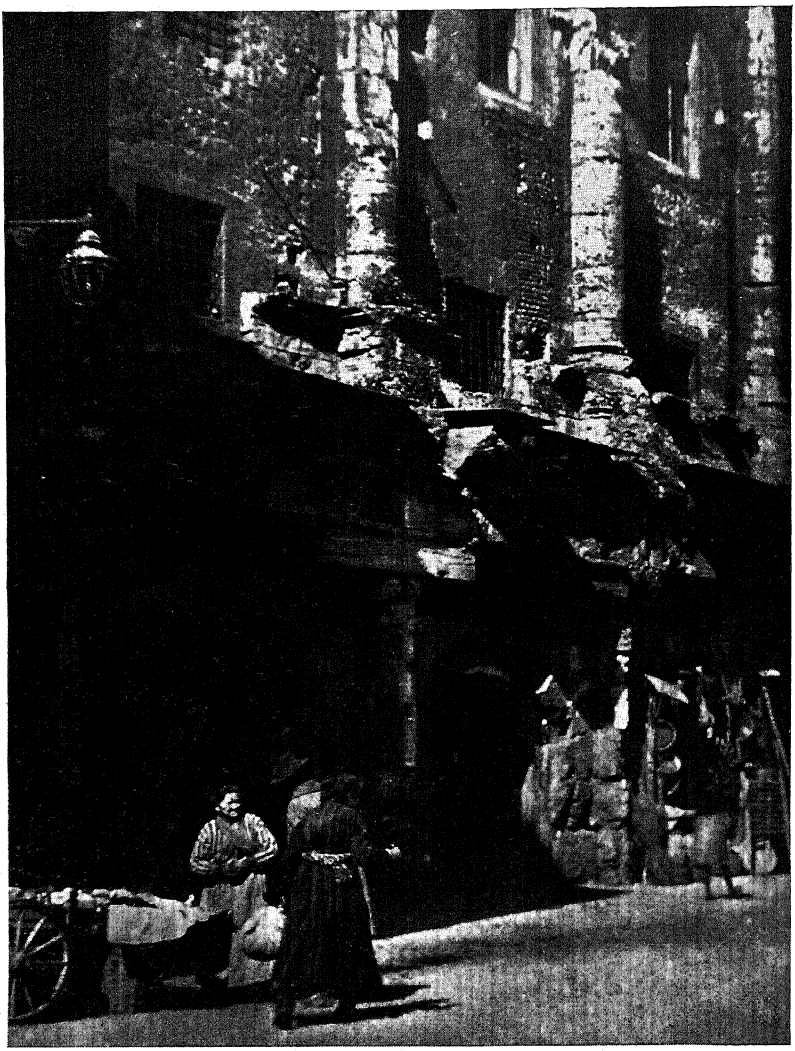
It is a fact that the photographic scale differs from that of the eye, in growing larger in an increasing ratio as the object nears. Moreover, the varying scales of a print or a painting are necessarily seen by the eye at one time because the picture or print is a flat representation; whereas in an actual scene of nature the eye does not *attentively* see things on more than one plane at one moment.

If we are looking closely at a person we do not see in any definite way what is behind or even beside that person; because of the point-to-point method of vision already dealt with. Similarly if for a moment we look beyond the person at some other figure, then we no longer see attentively the near person. Thus it comes about that although human vision does register the scales of far and near, it does so *selectively,* keeping each scale in its own separate view or plane. Since the eye cannot see all the scales at one time *in equal distinctness,* it follows that the representation of them in such a manner must be unnatural.

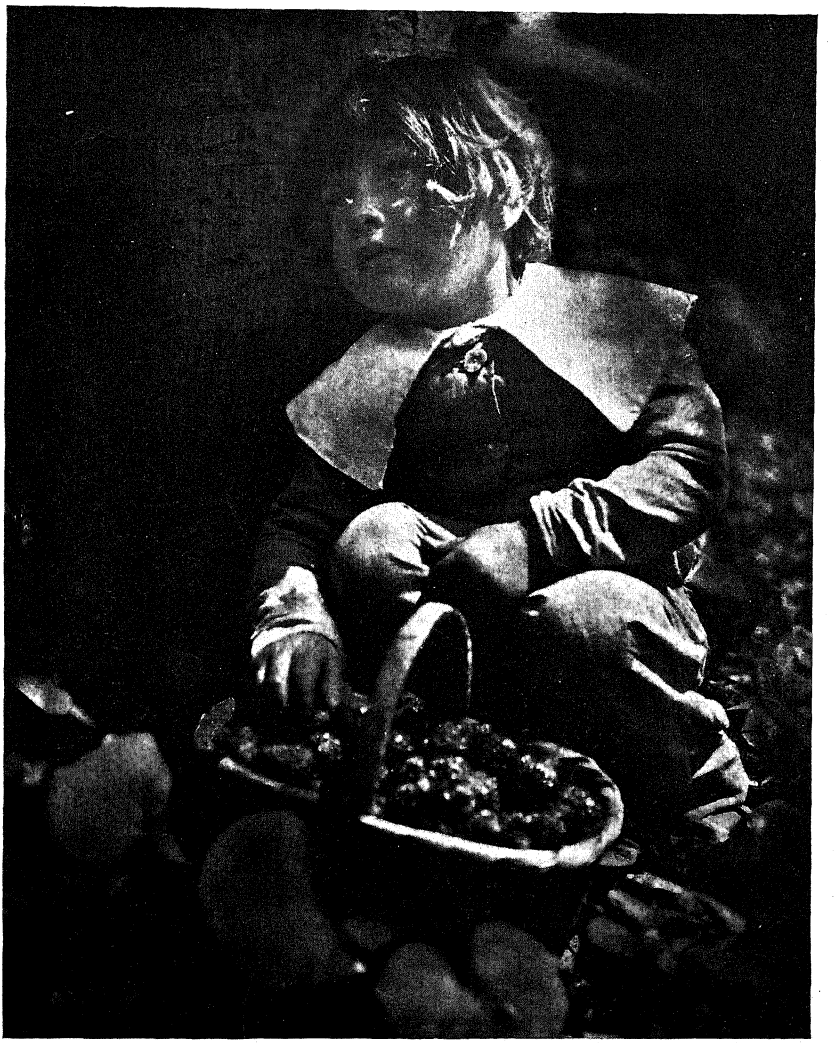


STILL LIFE — Minna Keene

PLATE 58



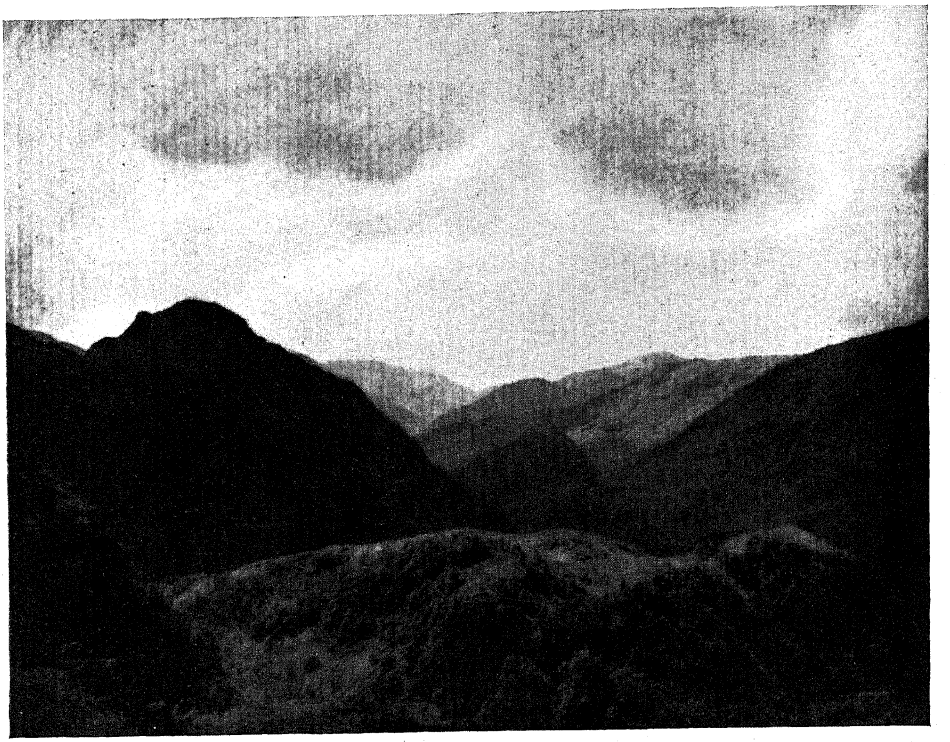
IN THE SHADOW OF CENTURIES — George H. High



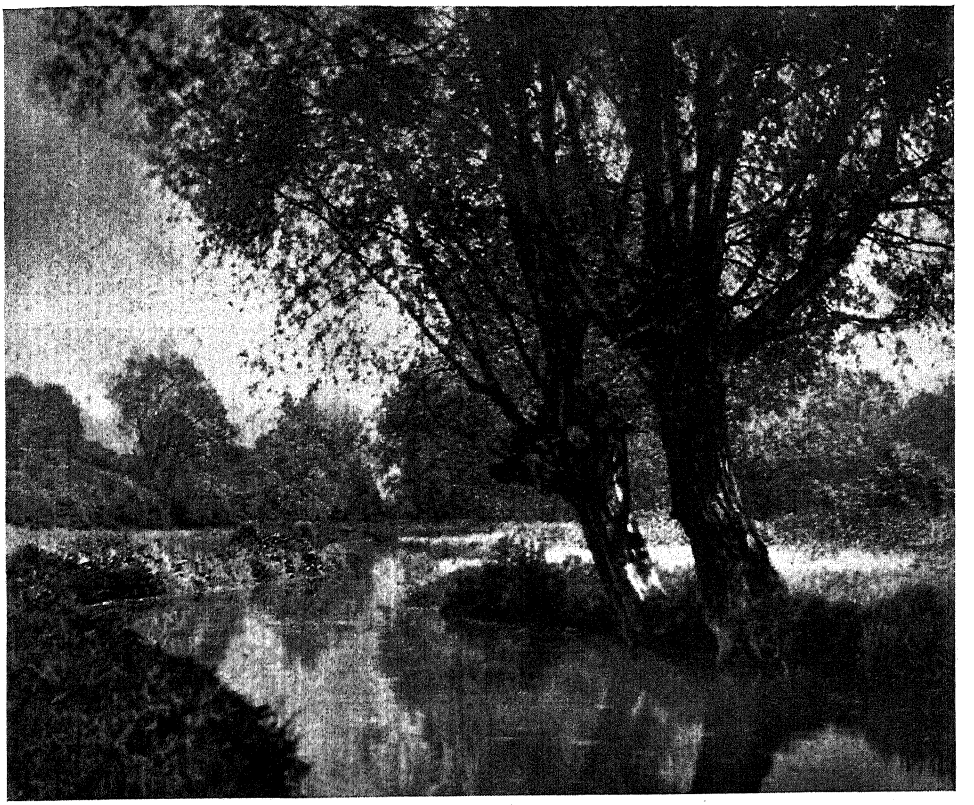
BUT WHAT ARE THE VOICES OF BIRDS — BUT WORDS?

Mrs. G. A. Barton

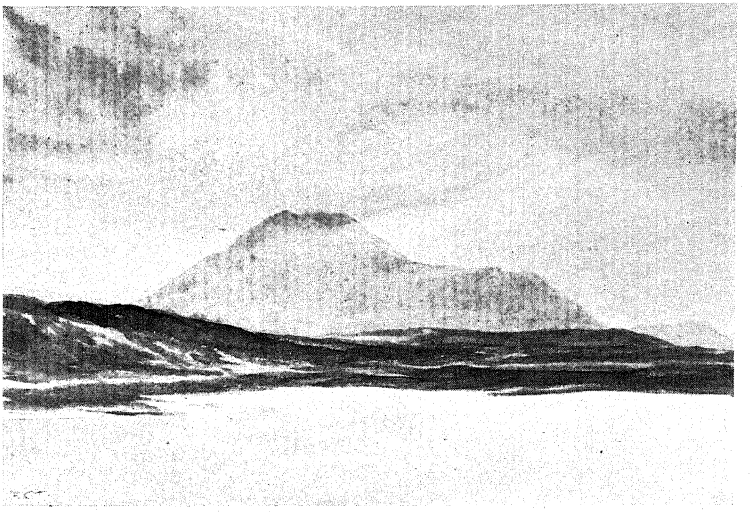
PLATE 60



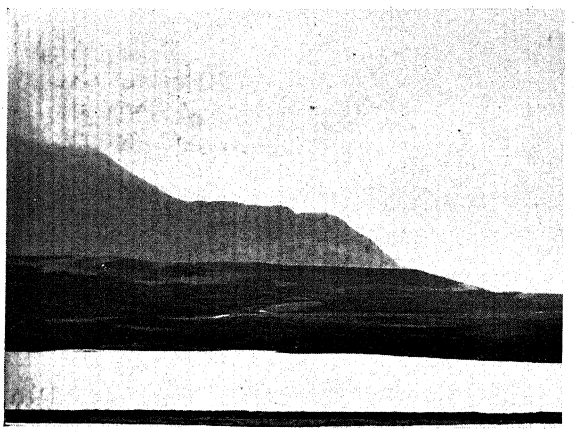
FROM SHEPHERD'S CRAG, DERWENTWATER — John Latham



THE WILLOWS, BROC-O-DALE — Herbert Bairstow



SCHIEHALLION — Sketch by F. C. Tilney



SCHIEHALLION — From a photograph

BESIDE STILL WATERS — O. C. Reiter

PLATE 64

A Foreground Study — W. B. Ferguson

Diagram of Tone Contrasts — F. C. Tilney

But it would never do to try to make pictures of objects as the eye, in this respect, sees them; and therefore the pictorial convention has been established which permits of the definite and clear representation of objects on different planes. Fortunately this convention fits in very well with the eye's point-to-point jumps; for the points of concentrated vision are so small that the eye can spring from a near well-defined figure to a further one equally defined and feel no anomaly, because it would make the same movement in viewing different planes of an actual scene. The eye is saved some adjustment of focus, nothing more.

Trouble comes, however, when the scale of the nearer objects is so much larger than that of distant ones that the eye *misses* the natural and expected adjustment of focus that would be entailed by the jump from a very near thing, which would be large, to one so far in the distance as to be small. The convention does not permit so much licence: to strain it too far is to embarrass the spectator and that is a bad fault in art.

If, as an alternative to this unnatural representation, we tried to represent the effect of looking beyond a near figure in accordance with visual laws, we should have to make the near figure unpleasantly vague; and that would be precisely the photographic near figure excessively out of focus — a horrible result only too often seen in camera work.

Photography is therefore faced with two difficulties in the treatment of the figures that the lens instates in foregrounds. If sharp definition is confined to them and the distant figures are loosely focussed, the result will be rather that of portraiture than of landscape or figure-composition. If, alternatively, both near large and distant small figures are equally well-defined, the case is little better, because, in accordance with human vision, the arrangement evokes an idea of a near figure being in the same plane as more distant figures, with the result that the near figure seems a gigantic one standing where the little ones stand. I do not say that anybody could be thus deceived, but that

is the subconscious feeling which makes the arrangement pictorially false. When this state of things occurs with a closely related group, such for example as a ploughing-team seen end-on, we get the anomalous condition of the near horse's head looking big enough to wear a nose bag which would hold the man at the plough tail so easily that he might be swallowed with the oats without causing the horse more concern than a moment's mild surprise.

The obvious solution of the difficulty is to avoid figures in the near foreground. The advice may with almost as much reason be extended to any object living or not, which occurs too near the camera.

FOCAL LENGTH OF LENSES

It is often stated that enlarged foreground scale is due to the use of a lens of wide angle; but the student must not overlook the fact that a wide angle implies a large circle of inclusion, and that its central portion is identically that of the smaller circle of inclusion described by the narrow-angle lens which enlarges it. The narrow angle will avoid some of the foreground of the wide angle; but if on this foreground there are objects which stand so high as to come within the more central circle of the narrow angle, they will have all the excessive bigness that belongs to them as wide angle objects, enlarged still more by the longer focus. The bigness of foreground must not therefore be charged to the wide-angle lens in principle; because focal-length of lenses has no bearing whatever upon the *relative* size of objects in a view: only on the *projected* size of everything.

There is a means, however, of adjusting the relative sizes of things: it is the standpoint. By going further back from an object it becomes *proportionally* smaller than do objects still further away. This is a resource which can be employed together with the varying scales of long and short-focus lenses, and between the two sufficient licence can be found for most pictorial propositions.

Because it includes so much, the short-focus lens seems to dwarf objects in the distance more than does the long-focus lens. We all know those beautiful hills that formed so impressive a feature of a view we wished to represent, but which we could scarcely find at all in the negative, so small and pale they were. We could get them twice the size by doubling the focal length, but then everything else would be proportionately larger too, though nothing would be so excessively large as the foreground things belonging to the narrow-angle view. If we step back we find that we can practically keep the hills at their larger size whilst reducing the scale of the nearer objects.

EXPANSE OF VIEW

The long-focus lens — favourite though it is with most workers — has the disadvantage of showing a very restricted field of view. It is admirable for everything except spacious landscape, and for that it is useless. I remember the surprise with which this fact was brought home to me when on a visit in Perthshire. We had made an excursion into the neighbourhood of Schiehallion, that solitary mountain of which the Scotsmen are justly proud. I sat down to make a sketch of it and my friend prepared to photograph it from my point of view with a camera carrying a 10½ inch lens (for a quarter plate). Quite in an ordinary way I set out the hill with a bit of distance on either side of it as in the reproduction here given, but my friend could only get about half the hill on to the focussing screen from my viewpoint, and had to retire a good many score of yards, only then to take the mountain in two halves, one of which is here shown (Plate 62).

The camera at all times induces a hole-and-corner sort of selection, but particularly does the long focus lens necessitate the habit of looking for bits rather than for reasonable expanses. A fine stretch of country makes a glorious kind of picture, and although the distance is always relatively too small, the enlargement of a carefully selected portion

from the negative will go far towards overcoming disappointments. In these days when hand cameras are almost exclusively used for landscape work, and contact-printing is practically used for "proving" only, enlargement from small negatives has become the rule. The less rapid emulsions have a grain fine enough to permit of considerable enlargement, and the wide-angle lenses of the small cameras can deal perfectly with any subject in which foreground objects raking into the picture have been avoided. Lenses of great focal length restrict the middle and further middle distance.

It is no rejoinder to this dictum to say that the eye cannot see beyond some ridiculous angle, it may be anything from half a degree to 180 degrees, according to the various authorities. The eye has no limit of angle within its power of revolving in its socket. We do not look at scenery as the camera does — held or tripoded so as to avoid the slightest movement. Our eye lenses are jerking about at all aspects, and that is the way we see and enjoy.

There is only one thing to remark regarding enlargements: it is that in landscape there should be crispness in the distant form and modelling of hills and mountains. The fascination of a mountain is in its form as revealed against a sky. There should therefore be definition enough to secure the character when enlargement takes place. Often enough we see too diffused an edge in bromide prints and a muddling up of the inner modelling and geological traits. It is not necessary to have the telephoto knife-edge precision beloved of alpine photographers, but there certainly should be, when weather conditions demand, the same degree of structural detail that the average eye can see without effort.

Not only does the wide angle admit more than it suitably presents in the *foreground,* but it does so at the *right* and *left* also, and at the *top.* The student must not get into the way of thinking that the foreground is only at the bottom of his print: it is all over the print. An

aerial photograph might be taken at such an altitude that, assuming the centre of vision to be at the middle of the plate, the clouds nearest to the lens would be exactly as near as the objects on the ground immediately beneath them: that is on the same vertical plane. And the clouds would be thus foreground-plane objects and equally out of scale compared with human visual standards. It is to be remembered that the rectangular boundaries of the photographic plate are mere matters of practicality and convenience. The rays that the lens selects out of the

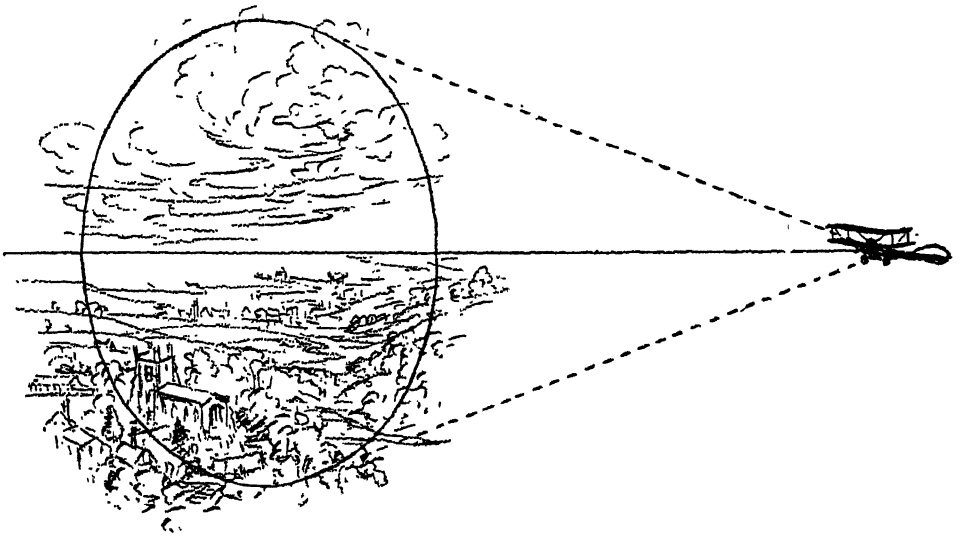


FIG 8. CLOUDS AS FOREGROUND-PLANE OBJECTS

myriads that come from their points in all directions do not approach it in a mass having an oblong section as in a photographic plate — if there is a section at all it is circular.

What I have presumed to call the circle of inclusion would, in the case of this aerial photograph, have the clouds and the objects below occurring near the periphery of the circle. The argument for omitting near foregrounds can be illustrated by supposing the vertical planes in a picture to be represented by a series of discs standing upright behind each other. Each would occupy the same area of space. The nearest

would represent the nearest vertical plane. The contents of the farthest disc would go many times into the nearest.

The difference between wide and narrow angle views may be thus stated in the terms of the disc metaphor. The wide angle gives things smaller in size and therefore more of them are crowded upon each disc than could go on a disc of a narrow angle. But in both cases, objects get larger *in an increasing ratio,* as they occupy nearer planes (or discs); which means that proportion suffers most in things that are nearest. If then by choice of point of view we cut out the nearest disc, what remains is, to that degree, in more consistent proportion. Let us cut out as many as we can pictorially do without. Everything that occurs on the complete disc of a plane must be considered — the middle as well as the edges. For if an object occurs in the middle of one of the near planes, we cannot get rid of it except by eliminating all up to and including that plane. To trim out a selection from the middle of a subject may eliminate a foreground, but will not get rid of an object that extends upwards into the middle of the picture from the base-line or below it. On the contrary, trimming would, by isolating the very object, only give it more aggressiveness. All this is to convince the uninitiated that the trimming-knife will not meet every difficulty with regard to exaggerated scale: that a carefully selected point of view alone can do so completely.

It must be conceded, of course, that the camera's power of aggrandising a foreground may serve on occasion to good purpose. In that rather futile pastime called " table-top " photography, the size of the nearest object is usually the point upon which these ingenious inventions turn. In real landscape, likewise, it may be often pictorially desirable to enlarge some stone or growth to dimensions which will convert it from the negligible thing it is to the eye into an important pictorial factor. A low view point and a close standpoint will bring about this effect. Mr. W. B. Ferguson has been good enough to hand

me a photograph taken with some such intention. It shows some rushes treated in the way referred to. In the ordinary way they would have been negligible foreground matter, scarcely distinguished by the eye and situated much below the skyline (Plate 64). A remarkable case of turning to good account the enlarged scale of near objects is furnished by Bertram Cox, who has vastly augmented the content of his " Buoys at Lynn " (Plate 79) by getting close to them.

FIGURES AS ACCESSORIES

FROM discussing foregrounds it is but a step to the consideration of figures and other accessory objects that usually find their place in the nearer planes of a picture. Mankind primarily and his domesticated animals secondarily are, in the popular idea, the chief ornament to the foreground of a landscape subject. Such is the social instinct of man, that he loves to see his own kind depicted in the views that picture-makers offer him. This has been an acknowledged proclivity for centuries, and painters have a tradition for the practice that is as old as painting itself. The Dutch were fond of animated scenes, and as their landscape pictures were for the most part taken from the country-side — agricultural, pastoral, and populated — the subjects of them were made homely and jolly by the inclusion of merry peasants and contented beasts of the farm, with hunting and sporting parties, and village games; whilst their canal and street scenes were peopled with comfortable burghers and their happy women-folk. But in the works of the great exception, Ruysdael — the man who loved landscape for its own sake so well that he preferred it pure and simple — figures are seldom to be seen in the wild and impressive scenes he depicted.

These facts show us exactly the *rationale* of accessory figures. There are occasions when they are not wanted. If the pictorialist is bent on making pictures of wild nature in all her force and grandeur, and in her moods of solitariness and sublimity, he is not likely to increase the content of such moods by any sort of figure. A painter could not do so even by exercising the utmost care and preparation; much less could a photographer relying only upon the help of friend, model,

or chance stranger. Supposing even that some excellently-conceived figure could be successfully introduced, there would still remain the fact that the picture evoked a human interest, and thereby forfeited something of the pure and unadulterated nature-interest that real landscape at its best can boast.

For it must be remembered that when there are different claims in a picture, they will be rival claims. It may be a friendly and harmonious rivalry, making for increased pleasure, as when fine color is added to fine form; but rivalry it remains, nevertheless. For this reason alone do painters who are devoted to the sterner beauties of nature omit the human interest.

Should figures appear so small or distant as to seem part of, rather than opposed to, the scene, then the wild nature interest is not robbed to any extent; and this matter of relative size is one factor in deciding the question as to which interest is predominant. The other factor is pose and action in figures. Those that raise no ideas alien to the ideas of landscape — for example figures that bend to the elements, or are engaged in bucolic occupations — these will by no means detract from the wild-nature idea. But warriors, even those of romance and antiquity, modern soldiers, mechanics, townsmen, trippers, are kinds that certainly will detract, particularly if they are not small in scale.

Let the human interest appear by all means, only let us put it where the Dutchman did — in streets, public parks, gardens, main roads, docks, and other places where the press of life is a normal and wished-for condition. A market-place deserted is quite as anomalous as a forbidding mountain waste dotted with picnic parties.

What the photographer must beware of is getting his figures too near, so that they will acquire a specious importance from their exaggerated scale. He must also beware of stalking — the universal and pernicious habit of " snapshotters." Ninety per cent of photographic figures are back-views. Nothing could be less inspiring to the spec-

tator. The proper way is not to steal up behind some poor unconscious victim, but to choose — wait for in fact or else do without — some function of work, sport, or observance, in which variety of pose and action will obviate the confessed stealth of the back-view, and the self-consciousness of the obliging wayfarer.

Some landscapes seem to appeal to the cultivated mind in a way different from the ordinary impressiveness of elemental nature. Those fortunates, growing fewer daily, who have a flair for the classics and whose thoughts fly at the slightest instigation to the mystical remoteness of ancient Greek culture, will readily feel the fitness of certain spots as "setting" for ancient myths. They will, in thought, people glades, water-courses, groves, with the supernatural creatures which were to the early Greek mind personifications of all natural things and all natural forces. This is an aspect of pictorial art that is not at all opposed to the spirit of photography, modern as it is. Given a suggestive setting, there are many ways of treating the human figure so as to endue it with that "generality" or idealism that the classic spirit requires. Indeed many excellent attempts have been made — I will not allude to the sad failures — which promise much for a specialised development of this class of work; though it must be stated that because of its delicacy of adjustment and rigorous demands, and because also of that little step between the sublime and the ridiculous, the use of accessory figures as nymphs, fauns, nereids and so on, to say nothing of gods and goddesses, is a thing not to be undertaken lightly. It requires real classic culture and feeling, for nothing else will safeguard it against traps and pitfalls, anomalies, *gaucheries,* and other misfortunes.

The placing of figures, cattle, and other welcome additions in a composition may be a help to the general design as well as a contribution to the subject's interest. There is a danger that the accessories may be too obviously spotted about; they will not look spotty, however, if they

take their place as units of the design and as extensions of the tone of their environment. There is a temptation to make them " stand out." This is usually the chief thing to avoid; for they will stand out of themselves probably. An accessory must not make any very loud claims or it will become more than accessory. It must be part of the scheme of design, not something that is adventitious to that scheme. A careful study at frequent intervals of works by the old European painters will get the beginner into the way of thinking of figures as material out of which to produce a design. From such examples he can see how they have been combined with trees, buildings, rocks, and wayside objects like shrines, wells, and pumps. A common criticism is that a picture must be either a landscape or a figure-subject and that if it savours of both it is hopeless. To me, that criticism is only empty pedantry. Should we be asked to disqualify Alfred Stieglitz for such a fault in " Gossip — Katwyk " (Plate 13)? Does it matter whether we call this work a seascape or a figure subject? What would it be worth as a shore scene without the figures? They are delightful in themselves, and their value is enhanced by the simplicity and the airiness of their setting. If there is a fault it is the mere chip of a boat on the left. That would have been better omitted. It is a silly fragment serving no purpose, but making the figures look as though they were supposed to be accessory to it by way of balance or compensation. They are not: they are the theme.

As a rule a figure is not happily employed as a foil or " balance " to any more important object, especially as that object will necessarily be inanimate (I am not discussing the placing of secondary figures). Though the accessory figure be smaller and less demonstrative in tone, yet its asset of humanity will increase its importance with the result that the interest of the picture will become divided and simplicity give place to complexity. But let the figure's importance swell that of the chief interest and greater power must result from combined forces. Put your

man against the tree; not at the opposite side of the composition: let him be on the steps of the portico; not looking across the road at them.

Assuming that there is nothing of prime importance with which to combine a figure, and that a landscape is rather in want of some point of concentrated interest; then a spot must be found where the lines seem to have brought the attention. Radiating lines will do this with certainty, and the point at which they come closest together will be the best place for the figure, if on other accounts that spot is available for the purpose. Alfons Weber demonstrates this very well in his picture " A Setting for a Romantic Story." The spot occupied by the figure is distinctly the right one, but it is, itself, not well placed in the field: it is too central and rather too small. Both these mischances could easily have been countered by considerable trimming on the left side and the bottom edge (Plate 65).

GENRE PICTURES

IN the earlier passages of this book there is allusion to the excellent work that has been done by photography in depicting domestic scenes or figures, and figure groups in interiors. It is a class of work that can hold a full measure of charm, as the delightful pictures of the seventeenth century Dutch painters indisputably prove. The names of Vermeer, Metsu, Terborch, and others come to mind at once.

The characteristics of these works are many. They combine with an intimate presentment of human traits, the allurements of design, chiaroscuro, colour, and textures. They are bright but not garish, rich and subdued without murk or gloominess. Apart from colour, which may perhaps be attained by photography in the near future, these allurements are well within the scope of camera-work. The increased amenability of plates, papers, lenses, and processes have overcome the difficulties that once made exposures lengthy, and there seems to be no reason why genre pictures should not proceed upon a triumphal career. Artistic effects, however, are in danger of being discounted by the constant desire of photographers to flood their scenes with light. Contrived reflections which light up shadows are inimical to the beauty of good tone pictures. Even that eminent master, R. Polak, has qualified his best successes by throwing light into the dark sides of things, whereby the fascinating mystery of the Dutch interiors gives place to a certain clarity, giving another aspect altogether to shade and to the forms within it. If a studio is used for the setting instead of a genuine dwelling room, it would, I feel, be productive of best results if it were

so screened and shaded that the light from a single source may simulate that from the homely window. To do this is to concentrate the illumination upon a proportionately small part of the composition, which should show a healthy crisp definition consistent with the suggested close view of the subject. Brilliant stuffs and accessories, lighted walls and similar agencies should be such as to procure a natural half-lighting in all but the brilliantly-lit parts, whilst the under parts of furniture, the recesses of structure and other factors should supply the deep tones in which a silhouette effect reveals their form against a background but obscures their smaller details. This, of course, is to follow historical tradition. Modern conditions would justify many departures from these effects.

Another essential is roundness in well-lit parts; and this in spite of any flatness of tone in the unilluminated shapes. Roundness, of course, will be the outcome of delicately graded tones in the principal object, which should show the attenuation of light upon its planes as they are turned more and more from the direct light. Above all there should be equability of tone in ample spaces. The worker must beware of crowding his scene with still life. This does not mean that there must be empty tracts giving the look of too large an area for the subject. The design must reach all over and be " engaged " with the edges of the print; but it should be a simple design, claiming rather than filling the space, and well " tied-up."

With such a scheme the picture becomes a display of gentle and glowing half-tone from which emerge the high-lights of faces, garments, and accessories well massed, with low and simple notes of deep shade. Effect is, indeed, the chief aim of genre work, not portraiture nor story-telling. Too much life, too much character, costumes too elaborate, will place the work in the domain of mere figure record work. Intense dramatic and comic situations, remarkable and unusual types of face and figure are detrimental. Genre should depict the usual, the

happy. It should show the beauty of the commonplace, not the surprises of the exceptional.

There is no necessity to use " period " or historical costume and settings; though they are very delightful when they are correctly rendered. The interiors and dresses of the present day are equally productive of artistic effect. Examples of costume genre work by Richard Polak and Guido Rey are given on Plates 5 and 6. Their charm is very much enhanced by their clever reconstruction of the true Dutch genre of which they seem to be direct reproductions. In the case of Mrs. Käsebier's picture (Plate 14) we have the natural modern note. In *form* this exactly ranges as genre work; but in *content* it is something else. Its theme is too profound, its action too unusual, its domesticity too sublimated for simple genre. It ranks as allegory.

The eighteenth century French engravers, whose prints are much sought after by collectors, give another aspect of genre work. It dallies with the rather sweet artificiality of the times and is concerned with amorous subject-matter derived both from particularly chosen episodes of classic stories and from the gallantries of the French temperament in vogue when the engravings were produced. The striking difference between the methods of approach, even when the subject-matters of the Dutch and French converge, is very obvious. The Dutch picture has no artificiality whatever: it is a reflex of bourgeois honesty of feeling, whilst the French is that of aristocratic make-believe. Artistically both are charming, but in the latter there is a wider range. Out-of-door scenes are plentiful and this suggests the possibility of more exercises in photography dealing with outdoor genre.

To remove the scene from an interior to, say, a garden, is to change not only the setting but the whole pictorial idea, since another scheme of lighting and chiaroscuro is entailed. Terraces, balustrades, flights of steps, arbours, statues, trimmed hedges, ilexes, yews, and cypresses make delightful *mises en scène,* and upon occasion may supply shady

corners and simple concentrated light; but on the whole the lighting themes are of a different nature to the Dutch subjects and the compositions somewhat more spacious in their parts. Costume models will be more in demand, because such subjects are rather remote from an everyday existence, but outdoor light may be made to borrow some of the charm that it owes to landscape art.

THE NUDE

IT is a new departure in a book dealing with pictorial photography to devote a chapter to the representation of the nude figure; but ideas upon matters of this kind have so greatly changed during the last decade that what was once a very occasional event, the exhibition of a photograph of the nude figure, is now a common practice. The change in mental attitude that has brought this about cannot have been due to anything exclusively photographic: it is either the outcome of escape from propriety or of emancipation from prudery; whichever the reader prefers. What motives have led to the change are not for discussion in these pages. All I need do is to note that the music-hall and the cinema now display the major part of the feminine form without let or hindrance and without those former sops to Cerberus in the shape of "fleshings" or "tights." It is a state of things that has at last become innocuous by its familiarity. Encouraged by this freedom, the photographer has emerged into the open, boldly showing the "studies" that in the old days he kept under lock and key.

Nudity in itself is natural and the only danger in it lies in its rarity. As it becomes less rare it may logically be expected to grow less dangerous. We have it from ethnologists that among savage tribes the strictest moral codes are observed where entire nudity is the custom. On moral grounds, therefore, the change may or may not be considered advantageous — it is a matter of opinion. On artistic grounds, however, something remains to be said that is more to the purpose of this book, and upon which there is less room for differences of opinion.

The commonest fallacy is that nudity, of itself, is an admirable

thing — a fallacy deduced from a shallow understanding of the foregoing facts. Mere nudity for its own sake is as indecent as ever it was. From time immemorial civilised men and women have been clothed. Misinformed people imagine that the ancient Greeks went about naked. They were, on the other hand, most punctilious in the matter of decency, and only in the gymnasium or in certain public "games" was the body stripped and then only that of boys. The Romans, before the decline of Roman tradition had set in, were, according to Seyffert, offended in their sense of propriety by the Greek practice of exercising unclothed. There are no nude female figures before the time of Praxiteles, whose Cnidian Venus was the first impersonation of the goddess unrobed. Other goddesses were always clothed. When the pagan religions passed, even less liberty in the matter of feminine attire was permitted: the Hebrew and the Mohammedan customs outdid the Christian in this respect, both in life and in art. During the Middle Ages there was no change and throughout the Renaissance era the representations of nudity were the outcome of just such a gratuitous assumption as that popularly in vogue today; namely that the Greeks always had nudity before their eyes. There is no evidence in art or historical literature of such a thing. But artists of the past centuries were not in possession of the facts that more recent research has placed at the disposal of the humblest modern student. The Italians, especially those of the Venetian school, had a passion for material beauty; they studied the figure industriously and, of course, seized opportunities of proving their appreciation, knowledge, and skill by painting the nude figure in their classical subjects of mythological and historical episode. But this was quite without justification by classic art itself or classic literature. In Homer, for example, even Venus is clothed.

The curious point of the matter is that the Italians themselves did not in ordinary life, any more than did the Greeks and Romans, divest themselves of clothing to the extent of showing and suggesting form

as do civilised people today. The ordinary public evening entertainment of the large European and American towns this year would have shocked to utter confusion any bloodthirsty old Visigoth, and any luxurious all-commanding Saracen.

Does this enormous and epoch-making change in outlook justify all and every attempt at photographing the nude? The argument is that if it is permitted to be familiar to the sight, there can be nothing against photographing what is seen. Here art comes in. Familiarity or not, the practice can only logically rest on the ground of a beauty-quest. What other ground can there be? The nude *has been* used for portraiture, but it cannot be said to be indispensable to such work. If the camera it not used for a beauty-quest nor for portraiture, the idea of which is absurd, then it must be used for a third object — one that is out of the province of this book to discuss. We must, in politeness, assume that every person who photographs in this branch of subject-matter does so because he considers the theme is one of beauty. Fortunately only a very small proportion of such an output finds its way into public exhibitions and the press; and the process of selection keeps out the rank and file of prints amongst which the ugly and the prurient may lurk.

It is for the raising of the general standard, so that the beauty and fearlessness of the human form may justify representation by the camera, that I venture to offer my remarks upon bodily beauty. But first I must submit the view that bodily beauty in the graphic arts and in photography are by no means the same thing. They differ in idea, in method of approach, in execution, in result.

If the reader will think for a moment what he means by the phrase " bodily beauty," he will, if he knows nothing of art, probably run over in his mind every likely individual of his acquaintance in the attempt to find one that would deserve the title. An artist, on the other hand, will not think of individuals at all. The phrase to him will evoke an

idea merely — something unattainable — taking shape finally in his mind perhaps as some well-known piece of classic sculpture. These variant notions upon the matter typify exactly the difference between the camera and the hand of the artist. Let an artist take the utmost pains to portray the figure before him, his best is still a translation. It is part of himself as well as partly the model. But in the photograph there is nothing of the record that is not exclusively a copy of the particularities of the model. It is a tell-tale document, inexorable in its uttermost detail, and it is the model and nothing but the model. In the artist's drawing, even if such exhaustive particularity had been attempted (which it seldom is) there would be the factor of the draughtsman's knowledge and experience of other models inevitably adding some element of generality. It is this generality that constitutes the ideal: it is the particularity that constitutes the accidental.

This then is the aspect that is peculiar to the photograph. It cannot attain to an ideal because it can only depict the real with all its peculiarities, its accidentals, and its faults. That very fact holds the germ of danger about which the moralists feel anxious. Should they have no objections to the ideal creations of artists, they cannot but shrink from the downright delineation of every detail of a real woman, a particular woman. Photographers have only one defence. It is that the woman's beauty made the photographic record of it a worthy thing. Unfortunately the number of women who could justify this defence is not as great as the number of models willing to pose. Here again, the camera is at a disadvantage, for it cannot, as the artist does, seek inspiration from more than one model for one result, or correct from its knowledge any obvious faults of physique. It is on record that the ancient Greeks — towards whom we must constantly turn in discussing these matters — created their best types in this eclectic way. The practice has continued through the ages. By its aid the painted figure may be a dream of perfection though taken from models before whom the

camera could do no more than record their imperfections as faithfully as their merits. The artist who is not a material literalist has no liking for ugliness in the human form. If the photographer exerted the same fastidiousness as the good figure-painters do there would be far fewer nude photographs.

One more point. The photographer who assumes that his camera is the equal of, or can surpass, what a notorious person once stupidly called " the clumsy hand of man," overlooks the fact that the beauty of his subject is bound up to a great extent with the posing. Grace can be secured with an indifferent model when the pose is adjusted to that end. Dignity and serenity may invest a figure with beauty where violent action, stretching and straining, and an acrobatic display of angular lines can only result in ugly awkwardness. Yet the works that find places on our exhibition walls are more often than not examples of this star-fish kind of posing, which owes nothing to classic grace and dignity, but seems to be derived from the subversive ballets of a subversive nation.

If the woman's form is beautiful there is no need to twist and contort it. Indeed dignity and serenity are put out of the bounds of possibility by such mountebank tricks. The beautiful woman is not required to show the strength of her muscles and the pliability of her joints. She is far better doing nothing at all, but standing in native worth, saying, as it were, " Behold me! " It is the male figure that better can be made to do things. And indeed that has been the rule throughout the history of art. The man is the doer, the figure of action, the hero, whilst the woman is passive because her beauty, more enthralling than that of the man, is sufficient in itself to form the theme of a work of art.

It is not enough, therefore, to make mere records in this branch of work, however technically perfect they may be. The photographer must learn the art of posing. But there is no cut and dried way in which

he can be taught: he must learn in his own school of self-refinement. His best master is observation and study of the works of art of the past both in sculpture and painting. The pity of it is that he does not take this obvious course at all. He is usually content to copy other photographs. Why he imagines that some other photographer is likely to be a finer exemplar in such matters than the great artists of the past, nobody but himself can tell. But it is so. We see one year a print of a high-kicking girl " all legs and wings," only that they are probably crooked into right-angles, and the following year we see half-a-dozen more, and the next year more still, until the obsession brings exhaustion.

The most important matter to the photographer is the proportions of the model — more indispensable than modelling, and of far more moment than size. Largeness goes for nothing. The " petite " figure is frequently finely proportioned while the so-called " fine " woman nearly six feet in height may be full of faults. I say " woman " not man, for the obvious reason that in this matter the interest concentrates upon the female form. It always did: it always will. The question of sex does not come in to any extent, if at all; though painters of the past were usually men. But in later years and present times, when women crowd the ateliers, there has been no change in this preference, because it is due to the anatomy of the model, not the physiology of the artist. The female form has smaller bones and less knotty muscles than the male. The lines are more suave, the modelling more gentle in gradation. Man in the nude has been painted often enough, but almost invariably as some classical or biblical male personage of whom the characteristics were not primarily beauty. The man's form is built for strength, and it is only in the sculptures and the antique that we find his beauty displayed for its own sake, and then only specifically so in the cases of Apollo and Adonis. But it happens that both these characters are made beautiful, not by an intensification of male characteristics, as in the example of Hercules, but by borrowing something of smooth-

ness of planes and suavity of line from woman's form, and therein seems to lie confirmation of her better claims to beauty.

It is obvious that proportion depends upon the skeleton, whilst neatness of the joints is determined by the articulations between the bone-endings, and modelling by the development of the muscles and their covering of adipose tissue.

To deal first with a few points of proportion of which the photographer should know something before he commits himself to the choice of a model, it is not necessary to go into the mathematics of the question; but for the sake of securing a little respect for those who have conducted the science of " anthropometry," as well as for the ancients who evolved standards or " canons " of beauty to which they were content to work, it may be noted that *the mean,* or the average measurements arrived at by pooling and dividing a vast amount of actual measurements of well-made living people, falls surprisingly near the ancient Greek generalisations. The theory of this classic canon is that the ratios of proportion which parts of the body bear to the whole equal the identical ratio which *the parts of the parts* bear to the complete part. If this harmony of subdivision is preserved throughout it matters little how big or how small the model may be. As a rule unusual height is the result of length of leg — a far more preferable defect than undue length of torso, for that is fatal to grace. In the body fully clothed the relation of length of back to length of leg may not be easy to determine, but there is a way that will disclose the facts. Let the model sit down. If she seems to have taken a very lowly seat, the thighs inclining upwards towards the knees, then there is an unusual length of lower limb. If on the other hand, the sitter appears to be on a high seat, the lap sloping down to the knees, then the legs are too short. It is a noteworthy fact that the northern races are, on the whole, nearer to the classic canon in the matter of relative length of leg and spine than are the Latin races, which incline to shortness of leg.

Long legs usually go with long arms, which are the less tolerable, because we think of apes at the sight of them. On the other hand, arms too short have a comic appearance. Consistently with the theory of harmony of parts, it is not agreeable to see one part of a member too long for the other part. A long thigh with a short foreleg reminds one again of the lower animals. In the Venus de Medici the leg is appreciably long from knee to ankle, a less exceptionable fact from which the figure gains in nobility.

Nobility, however, is much dependent upon the size of the head. A well-proportioned figure is hopeless if the head is large. The ancient sculptors were so well alive to this fact that they made figures seven and a half and eight heads high, which appears to be extreme judged by living mankind. But it must be remembered that the classic figure was usually a god, a goddess, or a hero, for whom dignity and strength were necessary attributes. To make a small head is the simplest way of making a large-scale body, capable of rising to the requirements of the prowess that mythology postulates.

Reasons for the larger head of modern man can be referred to the greater height of the upper jaw in northern races and a developed increase in the depth of the lower jaw. Viewed from the front, therefore, the modern face is longer than the ancient Greek face which, further, was not surmounted by the high-domed cranium that has since been developed. Discrepancies between ancient and modern are many. One especially, perhaps, in the female figure is chiefly seen in the proportionately longer leg of antique figures. Comparing the head with the torso in either case the difference is scarcely noted, and according to Prof. E. Brücke, who is the highest authority on the subject, the Esquiline Venus, which we all admire so much, has a head that would not look too small on the shoulders of a living girl.

There are, of course, several different types of figures; but they

can be conveniently classed into two — the slender and the full. Both types are beautiful; but unfortunately it often happens that models combine features of both types — an inconsistency of which the photographer must beware, for nothing is more unsatisfactory in a picture. The broad and rounded figure such as Rubens painted is suggestive of opulence, power, and strength. It is associated with the Roman type, and further is well fitted for the structural and allegorical uses to which the human figure is put in architecture. If the reader is able to recall Watts's picture " A Roman Matron " he will have in mind an excellent example of the type shown without the additional fatness that was the racial character of Rubens' model — almost invariably his own wife.

The other type approaches more often to modern standards and is not at all difficult to find in living women. Benvenuto Cellini's " Nymph " — a relievo — is an extreme case of slimness; but Jean Goujon created a lovely type in his " Diana " in the Louvre. She is slender without the slightest suggestion of attenuation. With the exception of one or two little short-comings from these artistic ideals the photograph called " Hebe," by W. Alan Wilson, is a most admirable example of the same style of figure (Plate 66).

Unusual breadth of hips gives a cumbersome look to an otherwise slim figure, and more especially so in a recumbent position, when if the model is lying on her side the upper hip is thrown up in a very marked degree. Breadth of hip has been emphasized in allegorical painting as typical of maternity; but we learn that a great diameter across the " basket of the pelvis " is not the factor that matters in childbirth: it is a diameter in another place that matters. The width of the hips must bear a proper relation to the other measurements of the body. In the Venus de Medicis it is scarcely so much as the width across the shoulders. But this is one instance only of the antique proportion. If the " neck " of the femur is long and somewhat horizontal, it will result

in a further separation of the trochanters, those bony points that can be felt upon the hips — and this, more often than the breadth of the pelvis, is the cause of the width.

The head has already been considered as to comparative size. In the living model there is little or no danger of finding it too small. A good facial line should be fastidiously sought for. The eye should be full, the mouth boldly cut, and the chin neither prominent nor receding. All these points are very happily secured in Mr. Wilson's " Hebe," who, moreover, has the classic straight nose and brow in one continuous line. When the ear is seen, as it ought to be, it is better small than large, and its curves should be sweet and shell-like, with its lobe detached from the neck. In these days we see the shape of a woman's head undisguised by an abundance of hair. That is, on the whole, an advantage because unless the hair is kept close to the head it takes all sorts of shapes and often bulks the head-mass too much.

If the hair is " down " the result is far worse in every way. Hair that hangs unrestrained over the shoulders is impossible pictorially. It suggests that the lady is at a tedious part of her toilet — nothing more. Seldom, if ever, do we find this condition of things in the art of the past; nor can we find it in the public life of civilised people; nor of savages, for they usually exert the utmost ingenuity in coiffure. The " hair-down " girl is a mistake of those who think there is something poetic about it — Vivien, Lorelei, and so forth. The arrangement obscures the best parts of the figure by a straight fall of something that can at the best only boast of colour and texture. Hence " bobbing " and " shingling " has removed the possibility of many mawkish mistakes. Nevertheless, " bobbing," though it has prototypes in ancient and mediæval fashion, usually conceals the ear, and tells a wrong tale of the shape of the head. " Shingling," on the other hand, robs the woman of her distinctive sex differentiation. The Greek method of drawing the hair back into a knot — the fashion also of recent times — cannot be

surpassed after all. It reveals the head-shape and yet preserves a hair-mass.

The neck must conform to the type of figure. A long neck is in place upon a slender torso, but not on a rounded and generously planned figure. It should be cylindrical, but it is rarely so in spare subjects with whom the muscles form facets upon the surface that should be "columnar."

A woman's shoulders are expected to be less in width than are her hips: with man the reverse holds. The waist which troubled artists so much in Victorian times has now recovered its natural proportions in the average woman. But from the egg boiler or hour-glass figure we have gone to the opposite extreme in the practice ladies have of trying to reduce themselves to the condition of emaciated boys. The woman considers her figure only from the point of view of the fashion-plate; and to approach this ideal may wear a sort of elastic vest which crushes the breasts and reduces all shape to a sort of block generalisation like that of the wooden cylinder that does duty for the body of a toy horse. No doubt some recovery takes place when this encasement is removed.

The skeleton is not only responsible for general proportion, but for one or two defects that result from articulation of the joints. The most frequent is in the arm, and is caused by an oblique attachment of the forearm to the upper arm. The defect is obvious when the model holds her arms forward, the hands in supination; i.e. with the palms uppermost. It will then be noticed that the whole length of the arm makes a considerable change of direction at the elbow. This bend is precisely the same condition as knock-knee, both being caused by the same fault in articulation. Both the femur of the leg and the humerus of the arm finish at their lower extremities in two knobs, called condyles. This formation enables them to fit into the tibia in the lower leg and the bones in the forearm, respectively, where cavities exist to receive them. If this conformation were equal and regular, the limb when

bent would fold up so that its lower portion would lie directly over the upper. But it frequently happens that the joint is not a neatly squared arrangement like an ordinary iron hinge. The inner condyle of both femur and humerus is sometimes so much larger than the outer one that the transverse line of juncture in the joint is a long way from being at right angles to the length of the bones, and this oblique setting of the joint may be so pronounced as to cause a considerable angle between the two parts of the limb when extended. To flex the limb somewhat hides the defect, but that is a resource seldom possible with both legs. In the arm the best method of disguising the angle is partly to bend the arm and then to pronate the hand — that is, turn the palm down. Pronation is effected by the crossing of the two bones of the forearm one over the other. The radius revolves round the lower end of the ulna, taking the wrist with it, and the hand is thereby turned down. In this position the hand has been thrown inside of a supposed line drawn in the direction of the upper arm, and thus an appearance of straightness is recovered.

The bow-leg is not so frequent with women as with men, in whom, if not extreme, it adds some notion of strength in certain poses of action and effort.

Another defect due to conditions of articulation is what is known as over-extension, by which the limbs at the hinge joints bend back beyond the point where the two members would normally lie in a straight line if extended to their utmost. A model may be able to arch slightly the extended arm in supination. The arching is not beautiful, because it serves no purpose and only comes about by a defective joint in which there is too much " play." Over-extension of the leg is seen in profile when the front contour takes a concave curve. There is a provision in anatomy for its prevention, namely a ligament at the back of the knee, which should act as a strong strap. If this is flaccid or over-long it allows the extensor muscles to draw the lower leg beyond

the straight line. In a very muscular man this is what often takes place, so that over-extension in a man's leg is frequently shown in works of art in order to suggest great muscular strength. The concave line thus set up flows admirably into the contour of the foot, and thence into the ground, with the appearance of giving the figure a firm grip upon the earth. But this is not a desirable effect for the woman's figure.

Another skeletal defect is very common in the elbow of women. In " Patience," The Lady Jane is made to boast that connoisseurs come long distances to see her elbow. Evidently it was innocent of that ugly point that sticks out beyond the general contour when the arm is flexed and, when straightened, wrinkles the skin which is pushed up into folds. The cause of this is an excessive length of the upper end of the ulna; an extension providing attachment to the extensor muscles of the upper arm. This bony extension is called the olecranon: it acts as a lever; and when pulled upon by the muscles can shoot out the forearm with great force as in the action of striking a blow with the fist. To the prize-fighter, therefore, a long olecranon may be a blessing; but here again such a provision is not desirable in the arms of the gentler sex. The prominence of the olecranon also has the effect of making the closely-bent arm appear very sharply pointed, and when bent at a right angle, the contour of the upper arm is drawn straight and turns a sharp, square corner into the forearm. Normally, the partly flexed arm should form a more rounded contour continuously from armpit to wrist. Rather surprisingly the pointed elbow is seen in Botticelli's famous " Venus," proving that he must have rather literally copied a somewhat imperfect model for an ideal figure.

Before leaving the skeleton there remains one more feature of the woman's figure that merits attention here: it is the degree of inclination of the pelvis. Painters, chiefly French, of the nineteenth century seemed to delight in exaggerated representations of the " saddle-back "; the name given to the condition of a deep fall in the back, due to an unusual

tilt of the vertical axis of the pelvis, when the figure is viewed in profile. Such a formation is, of course, necessarily accompanied by a balancing inclination of the spine inwards from the shoulders. There are a few instances only of this formation in classic art, but many more in the Renaissance group. The greatest Italians, however, followed the Greek choice. Titian and Tintoretto painted women with comparatively straight backs. To look at reproductions of the modern painters to whom I have alluded is to gather less idea of goddess-like serenity from their pictures than an idea of deployment of the figure by a coquette. The study called "Diana" by Stuart Taylor is the very antithesis of any such idea. Nothing could be more purely unemotional than this kneeling figure — so very quiet and abstracted. Its classic purity is largely due to the straightness of the spine, which shows only such slight curving as it normally possesses in a position of quiescence (Plate 67).

There are, further, certain formations not due to the skeleton exclusively that affect feminine charm. The finest figure will always be one that not only boasts of a well-proportioned bony structure, but also a properly developed muscular system, sufficiently covered with the necessary layer of fat and the contractile skin. It was to secure these several essentials of health and beauty that the ancient Greeks prescribed games and regular bodily exercises for their girls as well as for their boys. Muscles that are badly developed have no substance and do not furnish the body with the fulness of contour which beauty demands. On the other hand over-development of certain parts — as in the case of the ballet-dancer's legs — amounts to disproportion. Healthy development must be general. We find, for that reason, the finest figures in well-to-do girls who have the advantage of outdoor exercise of all kinds — not in those who lead sedentary lives or whose work entails great activity of a few muscles and comparative atrophy of others.

But given a good all-over development there still remains the variety in type, resulting in different formation of certain parts

in different individuals. It will be sufficient to deal with one or two instances.

It must have been noticed that the line of the shoulders shows great variation. Womanly charm seems greater when the line of the great trapezius muscle forms an outward curving line from the neck to the shoulders. It is characteristic of a compactly-rounded figure and is not at all uncommon. One sees it in the " Venus de Medicis." The opposite condition is a hollow contour line sloping upwards from the shoulders and apparently increasing the length of an already long neck.

The condition of the breasts is a self-evident testimony in the matter of beauty and is well understood. They are not a beautiful feature when from want of tone they do not preserve their normal form. There are various types. Among savage races they sometimes take the form of a cone of which a section would show contours at about 90 degrees, occasionally even less. This in a fully-grown woman has an animal appearance unpleasantly functional; but nevertheless it is the structural foundation which, when swelled out in its lines to a hemisphere enclosing the 90° angle, is the favourite form of the antique statues, which further allow slightly more fulness in the lower contour than in the upper, consistent with gravity. This is shown as far as it is possible to go without excess, in Mr. Wilson's " Hebe." Another type of breast is larger in the base and of less eminence, even in young persons; for the two varieties are not necessarily stages in development. The latter type is admirably shown in Mr. Stuart Taylor's " Diana."

There may be found also a variety in the position of the breasts on the thorax. Some have considerable space between them; but such variations will be found to conform to conditions of width of the thorax. The breasts are always set as though each had a slightly outward aspect. Whatever be the type, they are at their best before the epoch of maternity, though by no means always able to overcome gravity in young unmarried women. Pronounced pendulosity is often due merely

to slackness of the tissues and a non-contractile condition of the skin, the consequences of want of healthy tone. It should immediately disqualify a model for photographic occasions. Indeed, the pendulous condition in any part is unpleasant. It occurs markedly in the thighs with a sitting posture, and in the upper arm of mature women. Muscular tissue becomes flabby by debility and want of exercise because the sheaths and ligaments that should hold up its weighty masses lose elasticity.

An arm that is well formed is, on a healthy woman, a very beautiful member. In young girls it is often thin even in a state of good health; for fat is unequally deposited and has a way of migrating to different parts of the body at different stages of life. As age increases the arms increase in girth. At the middle period of life they are at their best, when they should approximate to a cylindrical section. A fault is the broadening out at the shoulder. And here must be mentioned a special beauty not always in evidence. Between the shoulder and the breast there is sometimes a cushion-like formation that makes a very lovely transition between these masses. The armpit nestles beneath it. Some suggestion of it may be seen in the half-length, " Black Drapery," by Arthur Kales (Plate 69).

A very characteristic beauty of the female form is the ovate shape enclosed by the lines from the waist to the knees when the erect figure is viewed from the front or the back. Standing on both feet, the model should show no bony prominence at the hip joint. If the subject is well covered with adipose tissue the hip bone — the great trochanter — only corresponds to a dimple. The value of this comprehensive shape of the hips is that it presents the greatest mass of the body as an æsthetic entity, in opposition to the anatomical and usual way of thinking of this mass as made up torso and limbs separately. The ovate mass is really half of both torso and limbs combined in a form of much value æsthetically, seeming to give essentially the characteristics of the sex. The head and chest are thought of as accessory to it, whilst the arms and the

parts of the leg below the knee are appendant to it. The greatest sculptors and painters have emphasized this generic ovate shape. It is particularly noticeable in the figures of Rubens and Correggio.

The beauty of hands is pretty well understood, the beauty of feet less so, because feet are seldom seen, and their standards of attractiveness are those of the shoe, which is utterly unlike a foot. If it were not that our young women now-a-days walk and play outdoor games, which they could not do in Louis heels, the female foot would be in a parlous case. As it is, the photograph that shows one with the beauty of the antique is a great rarity. The feet of most living people are comparatively hideous, and the high heel has brought about the straight line from the shin to the toes for which one seeks in vain in the canons of fine art.

Some allusion has already been made to the horror the modern woman has of fat. She thinks only of the fashion-plate; yet surely if she saw photographs of her sex in an emaciated condition she would express greater horror still! The impoverished form reveals all its "works" — the muscles and tendons, the pits and cavities, the bony prominences, and other distressing signs of under-nourishment. All these are meant by nature to be covered, filled out, and hidden respectively by a layer of firm adipose tissue, which makes generous contours and tightens the skin. A healthy figure is full, taut, smooth, firm, and velvety. Let the photographer beware and choose his models with an eye to beauty: he may thus do valuable missionary work among our women.

The present practice of reducing fat to the point of non-existence is fatal to beauty. Starved and cadaverous models are not only useless to artists — they are revolting to them, and the old days of tight-lacing held fewer horrors. The photographer will find his most serviceable models not among the paragons of fashion, but among the despised "fat creatures."

Above all in photography of the nude there must be no prudery or shamefacedness. Shrinking poses, averted heads — worse than all, masks — are downright unpleasant. They communicate to the spectator the embarrassment of the model, who ought to be above embarrassment if she is beautiful, and shameful only of her defects; in which case it is a crime to photograph her.

One word more — a woman partly undressed in a non-public way is rank indecency. Coverings should be *draped* upon the nude figure if they are used at all — not *left* on the all but undressed person.

And now it is necessary to say something of the ends in view in this branch of photography. Even with the loveliest model in the world there can be a kind of presentment that emphasises the wrong idea. The vast amount of so-called " art studies " is not in need of being added to. There is a more worthy field of work, and anyone who rightly appreciates the glory and grace of classic art can easily surpass the wretched things that have appeared quite recently in English and American books with spurious claims. The excellence of the posing of " Hebe " and " Diana " is a pointer in a good direction. Dignity and grace could scarcely go further. In " Hebe " the long line of the undraped side is a good instance of simplicity in design, whilst its searching and brilliant lighting gives it the fascination of a veritable statue. " Diana " is a painter's version of the figure. Its posing is perfectly managed. Long lines, again, lying almost parallel but for the great right angle of the posture which is the theme of the design. It will be noted that the head and the lower hand round off the ends of the vertical mass and give it a bow-shape.

In Arthur Muray's " Solitude " the theme is one of light and shade in relation to bodily grace. By the way, this figure shows how parts may vary in adipose covering. The legs are very full, but the upper part of the thorax and the neck are more meagre, and the action throws

the neck muscles and clavicles into strong relief which is emphasised by the scheme of illumination (Plate 68).

There is a more pictorial motive in " Black Drapery " (Plate 69). Arthur Kales adopts a painter-like presentment in his charmingly-posed figure. The modelling is not subtle; but there is a wonderful breadth of tone which makes the flesh gleam. This print really strikes a new note in the photography of the nude in that it uses the pattern made by the figure as a pictorial motive: the figure is not presented for its own sake as in the " Hebe." Here Mr. Kales has done something reminiscent of Tintoretto's treatment of the figure as a tonal shape, with the minimum of modelling. It is only fair to say, however, that the modelling of his print was by no means lacking, but the broad lighting rendered it so subtle that the block-maker could scarcely do it justice. Mr. Turner's " Meditation " (Plate 46) is likewise a painter's rendering that recalls the so-called " dark painters " who followed Caravaggio.

PORTRAITURE

THE only section of figure work not dealt with so far is portraiture, and for many good and obvious reasons it is not advisable to go into the subject to any length or depth. Portraiture by photography is an immensely important profession, and has its own literature and exponents. From such sources can be gained all the technical knowledge and commercial advice necessary for the photographer who intends to make portraiture his *metier;* and as this book does not pretend to be a technical one, all that has place in its pages is limited to whatever can serve the purpose of the amateur interested in taking likenesses. Of this, something has already been said. Reference has been made to the instinctive centralisation and symmetry of arrangement adopted by the raw beginner — a practice that dies so hard that it will never die.

When a further stage has been reached, the composing or designing of a portrait will prove to be a matter in no way differing in essentials and principles from the designing of any other kind of picture. Moreover, examples of portraiture exist so plentifully that deductive precepts seem to be beyond the occasion. In truth it may be said that anybody who has the taste to put any kind of picture together can do so in the case of a portrait. All the principles of line, massing, chiaroscuro, etc., which make a good picture, apply universally: subject-matter does not change them.

Where the amateur can more reasonably ask for further guidance is in the psychological aspect of portraiture. It is an aspect which does not evoke much literature. In fact, I know of no book in which the subject is treated except my own little brochures: "Portraiture as

Human Documents" and "Portraiture as Pictures."[1] This psychological aspect is really of chief importance, since it is the very origin of the impulse, as the earliest examples prove.

Certain it is that among all the portraits remaining to us from earliest times, those which are most highly prized are those in which the soul of the sitter shines forth. As to the outward characteristics, they are of course necessary; yet it is not of moving interest to know that Julius Caesar had a thin face and not much hair. That might be said of millions; but to read in that thin face the quiet and reasoned determination of the supreme administrator, writer and soldier — this is a quality which makes his sculptured head a psychological treatise for all the ages. Egypt makes the first success, however, in the carved and coloured likeness of Queen Nefertiti, Tutankhamen's mother-in-law, one of the most human portraits of remote antiquity.

It would be excusable to think that our own enlightened age could easily surpass the best of bygone centuries; but the fact is that modern portraiture, though it still produces fine things, has by no means excelled that of the early Flemings, the Italians, the Germans (as represented by Holbein) the Netherlandish (as represented by Vandyck) and the British School of Georgian days. The best of any of these are the psychological portraits. Modern works are concerned very much with virtuosity of execution, which treats the sitter as a mere model who is made a medium for light and shade and colour effects, or, as in the case of Whistler, for arrangement and tone effects. This may be painting particular people, but it is not portraiture in the true sense. It relies too much upon a synthetic vision; and the reason why old portraiture is strongly appealing is that the *synthetic vision* was not striven for, but only came necessarily, as the painter's normal obligation. The early painters consciously and deliberately strove for the *analytical vision;* and the truth of this contention finds proof in Holbein's works.

[1] Nos. 4 and 5 of "Tracts for Pictorial Photographers."

In short, portraiture is the only branch of pictorial work in which record-making is demanded.

It is impossible to portray a person's mind and temperament, life-habit, and life-story, except by most accurately delineating facial characteristics. And of these the muscular formation is of more importance than the bony formation. For though the shape of a man's skull may give some vague idea of his intellectual equipment, it says nothing of his emotional. That is the province of muscular form, which from babyhood is moulded, changes, and ultimately crystallises into permanence, by the agency of the emotions. What a man feels, his face reflects: what his face reflects is shown by the contraction or relaxation of his facial muscles; and these, in the end, affect the appearance of his eyes and his mouth, the organs of expression. Likewise the appearance of every other portion of his face that less directly is moulded by emotion is in part affected by the muscular functioning of the organs of expression.

It will be granted, therefore, that it is in the form and modelling of the features that the appeal of portraiture lies. To treat a head in such a way that the subtleties and refinements are lost sight of may be a highly approved method from the impressionist's standpoint, but it cannot be said to hold the essentials of portraiture. If all that is wanted is a presentment of the appearance of light, colour, and atmosphere upon the sitter's head, a barber's block might almost as well serve the purpose. The good portraitist delineates, as Holbein did, the minutiæ of shape and modelling of all the parts that make up what is comprised in the eye: that is to say, not only the pupil, but the eyelids, the eyebrows, and the folds and creases of adjacent parts; he must give the precise shape of the lips, and the modelling around the mouth. In doing so he will be delineating the habitual movements of the sensitive circular muscles which surround the eyes and the mouth — those wonderful orbicular muscles that expand and contract, move in every

direction, remain still at one part while another part changes — and all at the bidding of passing thought and for no other purpose whatever but to expose that thought. In a less degree, the nostrils and lines of the cheeks, the shape of the chin, the brow and the set of the hair upon it — in all these particulars life lurks. Through them the heart, as well as the brain, may be truly read.

What Holbein did the lens can do. And the lens can do this faithful recording better than it can do the other aspect — the impressionistic. A photographic portrait that is diffused, tricked out with effects of lighting, or differentially focussed is no portrait in the proper sense of the term — it is at best an essay in head presentment.

The works of D. O. Hill and Mrs. Cameron have firmly established the claims of the camera in this branch of art, but to my mind they do not, in any single instance, surpass the superb effort of E. J. Steichen given in Plate 15. This portrait of Lenbach is the most eloquent human document that I have knowledge of in photography. Its author is analytical with Holbein; he is with Vandyck in design and with Rembrandt in poetry. The portraits from Lenbach's own brush were highly psychological. He emphasised the eyes of his sitters. Steichen, with happy imitation, has adopted his sitter's own method in this respect.

Photographic portraiture has advanced to high efficiency by reason of the fitness of its ends for its means. It is not too much to say that camera portraits at their best can vie with modern portrait-painting and at times far surpass it. In the hands of the amateur it will not, as a rule, possess that luxuriousness of *format* and finish that the professional article does; but that is no reason why the amateur should not try his hand at the delineation of character without attempting to do anything in the style of the professional. Portraiture by amateurs usually takes the form of character studies, and when a really interesting model is secured nothing can be more worthy as subject-matter.

For the amateur, studies of peasants make a most fascinating

branch of portraiture, far more picturesque than falls to the lot of the professional. An excellent example is seen in the print of a Spaniard, " El Viejo Arrabalero " by J. Ortiz Echagüe, which embodies interesting facts of manners and customs besides humanity (Plate 70). The studies of Stephen H. Tyng are well worthy of the world-wide reputation they have earned. " Dinah and the Pic " is fascinating as a human document, and if the reader asks himself why it is so he will have to admit in the end that it is because of truth to the mass of minutiæ of form and texture. To say that the charm is in the truth of character is only a paraphrase (Plate 71). Mrs. Nancy Ford Cones supplies another example of portraiture in a class that the amateur has all to himself — the representation of personages in fiction. Her Mr. Micawber could not be beaten. The sitter was simply a friend in whom the photographer saw the possibilities, and who kindly humoured her whim. The result, as all Dickens lovers will agree, is highly creditable to them both (Plate 72).

STILL LIFE

AS a separate class the photography of still life involves no principles that have not already been dealt with. But the two examples given show to what extent of beauty and interest this branch of art may be carried. Mrs. Keene's example (Plate 57) is the traditional thing; but in Ranald Rigby's "Candlelight" (Plate 80) we have the most difficult of lighting problems attacked and triumphantly conquered. He gives the three conditions of light direct, light reflected, and light transmitted, with perfect conviction and with every suggestion of colour and delight of surface texture.

CONCERNING SKIES

A BEGINNER does not usually distinguish between different classes of work; he combines them all unthinkingly. It is not until he begins seriously to consider the merits of his efforts that he becomes conscious of a different outlook on the various aspects of his subject-matter, and then the attractions and difficulties of each branch of work begin to loom larger and he finds that progress is expedited by a little specialising. The landscapist who takes himself seriously finds so much to think about in the problems of tone-values, skies, and effective designing that he is glad to let figures alone for the nonce.

A concentration upon landscape for its own sake is therefore the first sign of advance beyond the stage of thoughtless " snap-shotting," which usually mixes up landscape, architecture, figures and what not with happy indifference. To treat architecture as incident in landscape or to introduce figures should be a later stage in pictorial experience, for it is more likely to present difficulties than landscape pure and simple.

With the exception of the immediately foregoing sections that deal specifically with the figure, the main burden of these pages has been that of landscape. It is therefore scarcely necessary to apportion another section to this department of pictorial photography. Nevertheless, there is one aspect of landscape work upon which something specially important remains to be said.

The point at which most attempts fall short is the relationship of the sky. If we can clear our minds of the conventions that have crept into pictorial photography, and can regard the prints we see from the

point of view of natural truth as the eye sees it, we can but admit that most pictorial photographs fail in giving the marked difference that actually exists in nature between the luminosity of any sky and the tone value of the land beneath it. A free and unprejudiced view is not easily acquired by those who see a great many photographs but do not make the habit of observing nature apart from photography. The average camera landscapist is obsessed by nearly a century of tradition in the matter of skies, the sum and substance of which is that *he must have clouds in his picture.* This would be unexceptionable if it were the fact that no sky exists without clouds. But the cloudless sky is frequent enough and is, of itself, a refutation of the dogma.

In the early days of camera-work clouds eluded the photographer, and we have seen that as long ago as 1853 the adventitious insertion of clouds was recommended because otherwise the sky appeared as an unmodulated blank space. If, instead of recommending hand-made clouds, those early advisors had proposed an adventitious gradation of the sky space, a less disastrous tradition would have been founded. Not only should we have been spared countless absurdities in the way of invented clouds; but the inexorable tradition that clouds are indispensable would not have prejudiced and blinded the amateur in the matter of tonal relationships. As it is, there is good reason for saying that taken as a whole photographic skies are far too dark; and the fact is that only in those unfortunate cases where the land is hopelessly under-exposed do we get some kind of suggestion of a properly related high tone in the sky.

Since the photographer is determined that his views shall have clouds enough, he usually crowds them in and models them up with such force — or, in other words, prints them in with such force — that the sum of their tones lowers the whole sky space to the range of the land. This reduces the whole picture to the lifeless monotonous condition that we know only too well, especially in the bromoil enlarge-

ment. If we were condemned to live for six months continuously under such skies many of us would not live any longer, outside an institution for the mentally deranged.

Although skies are, in themselves, the easiest of all things to photograph, they are pretty generally treated as negligible by the pictorial photographer, who postpones consideration of them until such time, be it when it may, as he can solve his difficulties by use of his enlarger and his sky-negatives. This may still be due in part to the earlier difficulties of getting the sky at the time of exposure. But the practice of printing-in a sky is, in the estimation of the perfect technician, a method to be deprecated. To obviate all such troubles a shameful and ridiculous line is sometimes taken by those who teach. The aspirant is frequently recommended not to include the sky in any view he may select, and I have been told of cases where this advice was stated in the terms of an inexorable " never " by the mentor.

For a true lover of landscape it is as impossible to omit the sky as to cut the Prince of Denmark out of " Hamlet." The sky is everything in a landscape — even a mountainous one. Where is the effect in a view which has a background of mountains reaching to the top of the print? Where is the mystery and grandeur without a sky-line; where is the suggestion of romance, altitude, relief?

It is astounding to me that aspiring landscape pictorialists should suffer such abysmal ignorance as these words imply — " Never include the sky." Is there any hope at all for photography while people to whom this is possible presume to teach? Had the aspirant consistently been told never to photograph a landscape without a fine sky above it, and told with an equally inexorable " never," he might have contracted the habit of studying skies. On the contrary, he has been encouraged in the habit of looking only at buildings, hillsides, and other objects that obscure the sky; and this he does with the express intention of finding little " bits " — doorways, pumps, stumps, carts, and barns

— anything that his darling long-focus lens will pick out from a more reasonable angle of view; and these odds and ends he classes as " landscape "!

Every exhibition shows that there are photographers who by their enthusiasm, experience, judgment, and skill can produce a perfectly satisfactory sky on the same negative as bears the land. It was done at the end of the last century to my knowledge. It is done every day now. The pictorialist is no longer threatened with the alternatives of either the Scylla of a " bald-headed " sky, or the Charybdis of a mass of dark marks he hopes will pass for clouds. The latter being by far the worse fate, it behoves him to use the natural sky whenever possible. For, meteorologically, it is the right one for the effect, and that is a cogent reason of itself. Not many people understand anything about such matters, but it is always the best work that cannot be caught tripping by the lurking expert in the multitude. And some nature-lovers are redoubtable experts in sky-lore.

To be scientifically accurate it is, of course, wrong to make two exposures, one for the earth and another for the sky, because to use them both in one picture is to combine two different series of phenomena. The tonal values given by a single exposure must be the right values if there is any truth at all in the automatic renditions of photography. If the objects on the earth all go black when the sky is secured by a very short exposure that is precisely what they should do, because the key is necessarily so low that there is not light enough left at the lower end of the scale. To lift the key by lengthening the exposure so that the lower end of the scale does get light enough — particularly light enough for detail in the shadows — means that the upper end of the scale of the printing paper does not extend far enough for the light of the sky to be completely registered. If the darkest shadows in the clouds are registered light enough, the really brilliant parts can come no lighter than they. This is what photographers call " all bunged up "; but it

is photography's honest attempt to attain tone value in its proper ratio; and, so far, is obviously more " correct " than the alternative of combining two different keys in one picture by making different exposures for the upper and lower ends of the scale. As far as all this is concerned, therefore, the pure technicians are right in deprecating the printing of a sky from a separate negative.

Human nature, too, sides with the technician, for the eye cannot look at the sky and see detail in the shadows on the earth at the same time; that is, unless the sky is a very dull one. But a dull sky is not often what the landscape lover calls a beautiful sky. He gets over his difficulty with a brilliant sky by the rapid accommodation of his eyes which permits him to look above and then below and then above again; there being each time some functioning in his eyes that allows him to see exactly what he wishes to see.

Photography cannot rise to the occasion in this way. Its correctness is stiff and unbending and therefore utterly unlike human vision, which is a composite thing of compromise, adaptation, and constant revaluation. But it is this composite vision that gives us all our experiences and all our delights, and is to us the real truth — the truth of observation and experience. The best thing pictorial photography can do therefore is to emulate that vision-truth and discard its technical truth whenever it contradicts.

This is the argument for printed-in skies when, by reason of natural, technical, or artistic conditions, landscape and sky cannot be rendered with the truth that is beauty on one plate by one exposure. I add " artistic conditions," because there are occasions when the pictorialist requires some particular formation of cloud in order to help out the lines or the massing of his design. The only thing he has then to beware of is using some negative which obviously tells a tale of different conditions from those of the picture it has to augment.

One way that photography compromises in this matter of tonal

scale is by use of the panchromatic plate and colour filter. These result in the elimination of the blue light that reaches our eyes from the sky. With such a reduction in the volume of light the sky is brought lower down in the scale whilst the earth is not, comparatively speaking. The shortened scale is more within the compass of a technical correctness, and is claimed to simulate the visual key of tones. It is a disputable matter. When one looks at the good sky-renderings that were made before the advent of " colour-corrected plates " and their attendant filters, one sees no conclusive evidence that the tonal relationships were less good in that earlier work; but one sees every day unquestionable certainty that panchromatism, as it has been called, is more often abused than fairly used. Skies are heavier now by " straight " methods than they were by " fake " methods. Shakespeare remarked, " There is poor choice in rotten apples."

The " cotton wool " skies and those other nondescript firmaments that are classified as " fake " do not support any claim in these days of improved photographic material; and possibly they are now practically obsolete. But the alternative is not panchromatism. The real alternative is a knowledge of skies and a proper sense of tone contrasts in nature. Thus equipped the pictorialist is quite safe with his " cloud-negatives " and will not commit the solecisms of the blundering panchromatist working blindly.

Few workers have surpassed J. M. Whitehead in the skilful use of a sky negative to add to the effectiveness of composition and the dramatic intensity of the subject (Plate 11).

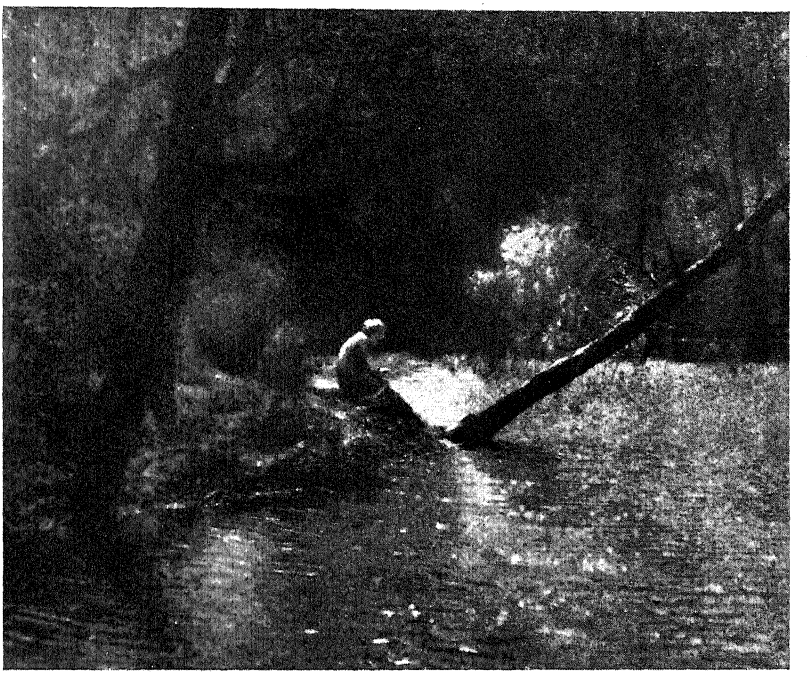
PART III

PROBLEMS TO COME

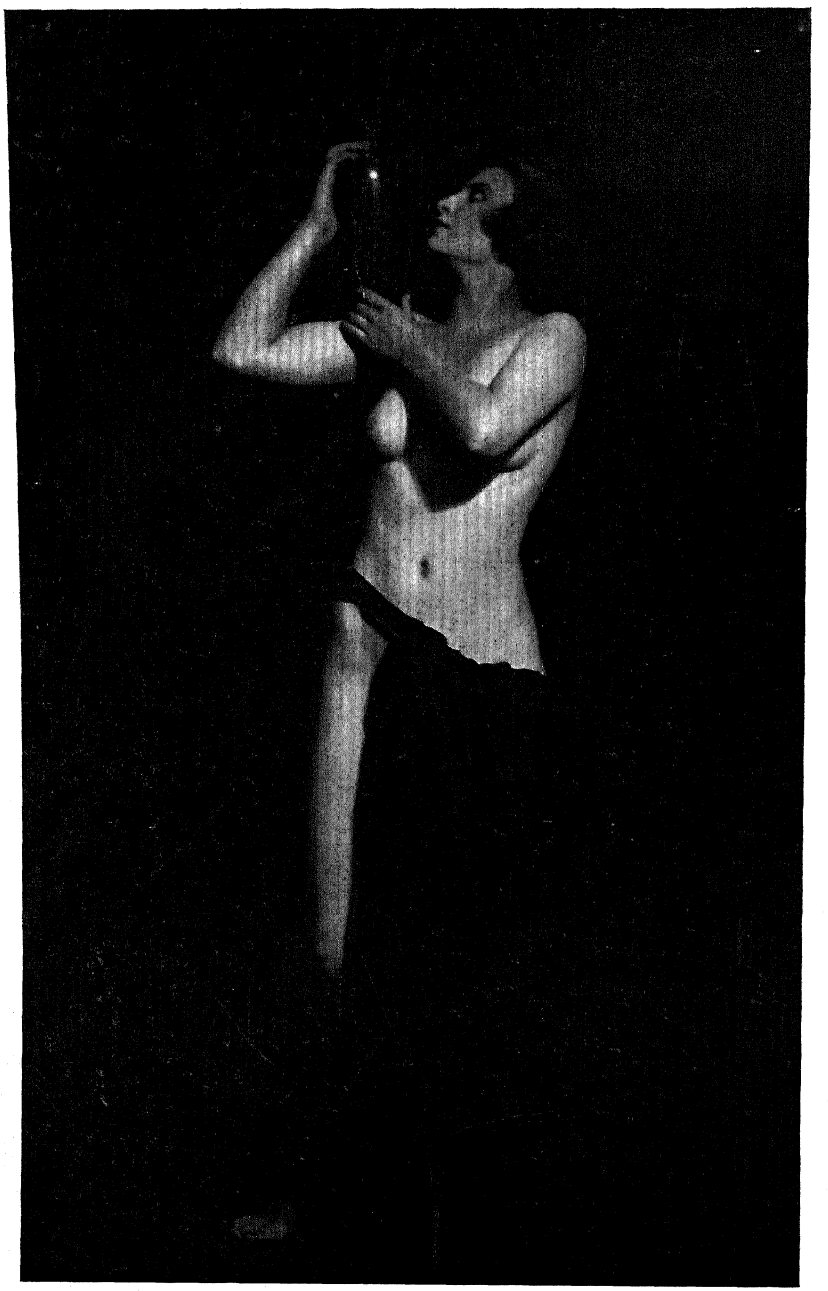
THE future of pictorial photography teems with problems, some of which are more willingly evaded than dealt with. A few are looked at, turned over, and put down again, like those worrying documents that stay upon our tables, too pressing to file and forget, too important to ignore, and too bothersome to tackle.

The problems that always lie in wait for the pictorialist are not so much technical difficulties as technical obligations: they have become problems by being crystallised into matters of policy and prejudice; because policy and prejudice are, in many places, the forces that govern reputations. Most pictorialists are, therefore, directly or indirectly restrained by these technical obligations from a true and free personal statement of their tastes and preferences.

It is not possible to allude to all of the problems, but among them may be noted: detail in the shadows, always; mechanical gradations; absence of so-called halation; photographic perspective; and panchromatic tonality. These, to mention no others, vitally affect the master question of the future status of pictorial photography; for they concern the eyes as well as the camera, and consequently they have a popular interest outside the limits of photography. Is the camera picture ever

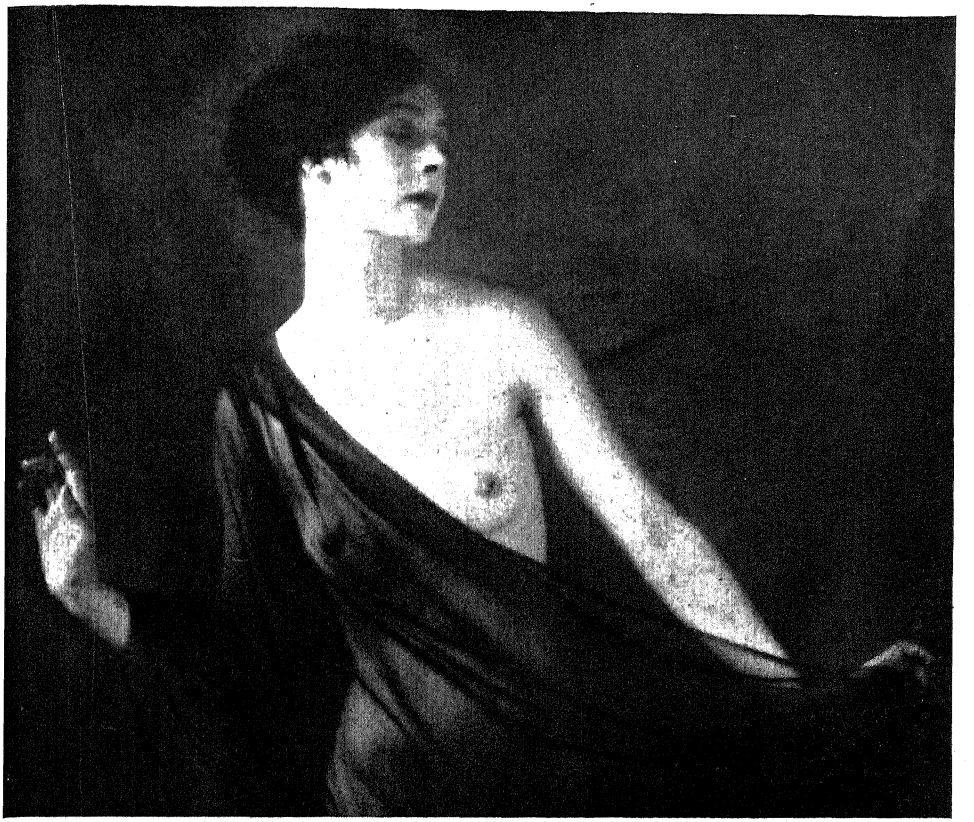


A Setting for a Romantic Story — Alfons Weber



HEBE

W. Alan Wilson



BLACK DRAPERY — Arthur F. Kales

PLATE 70

EL VIEJO ARRABALERO — J. Ortiz Echagüe

DINAH AND THE PIC — Stephen H. Tyng

PLATE 72

MR. MICAWBER

Nancy Ford Cones

going to be generally accepted as a legitimate medium of the fine arts? Or, on the other hand, is it always to look to science for its laurels, content to be appraised by the standards of technical performance? These alternatives are the directions on the finger-post that stands at the division of the ways.

Some of the problems mentioned above have already been dealt with; but there are three which demand special examination and discussion, because they act frequently as bones of contention. Halation and panchromatism have admittedly a solid foundation in science, but perspective rests upon recognised conventions. In these three cases pictorial photography that is judged by an art standard gains but little if anything from the fulfilment of technical obligations regarding them. For it can, I think, be shown that the technical standards are at variance with the art standards — if indeed there are such things; and that photographs that conform rigorously to technical standards do so at the risk of missing the recognition and response that human sympathy offers for works which approximate to the peculiarities of vision.

HALATION

THE evils of halation are well known, and it is scarcely necessary to explain that they occur chiefly in a class of subject that includes a bright light in dark surroundings. But it is not this natural effect that goes by the name of halation: that term is given to the results in negative and print of which the natural conditions mentioned are the prime cause. A subject involving the contrast in question usually gets a longer exposure for the dark parts than is good for the light parts. It also is usually developed longer for the sake of density in the dark parts than is required for sufficient density in the light parts. If it is developed long enough for the silver-bromide grains to be acted upon in the lowest depth of the emulsion, then the increase of density wherever the light has penetrated will be excessive.

Short exposure, however, is scarcely a safeguard, because it usually leads to over-development in the fond hope of getting something more of the image than just development will render.

All this is applicable to a hypothetical plate that would render a true and natural effect of light-glare and light-scatter from a bright object or a luminary. But there are well-known untoward circumstances in photographic technics which carry the evils much farther than this. The poor photographer finds that the light which has passed the lens does not stop at the emulsion: much of it goes right through the emulsion; and further, what does not pass through the glass or celluloid is reflected back again from it into the emulsion. Any light rays which fall at an angle naturally shoot back away from the point of incidence in accordance with the laws of reflection, and the light-image

is thus spread. Backed plates are the antidote for this trouble, of which it would be superfluous here to say more, except that it used to be claimed that the defect was almost unknown in films, owing to their comparative thinness; but recent experiments have proved that good orthochromatic and panchromatic plates, unbacked, show a surprisingly small amount of halation, and that " cut film " and double-coated plates are both bad.

Another aggravation is the ricocheting of light in the emulsion itself from one silver-bromide grain to another. As this is a thing which must be a normal procedure in the taking of any photograph, it does not appear to be worth all that is written about it in connection with halation. But I have alluded to this in order to be allowed to register a protest against giving this action in the emulsion the name of " irradiation."

The sublime and beautiful word " irradiation " — with all its lofty associations in religion and poetry, sparsely and jealously used by Milton and other masters of our language, has been appropriated by some groper in a laboratory to do the negligible duty of distinguishing the reflection of light between emulsion grains from the reflection of light from the glass of a plate — a minor variation of the same phenomenon. Who originates these etymological depredations? Photographic technicians have already coined for themselves a word to meet the case in " halation," which quite well implies the halo that surrounds brilliant spots. Nobody else but photographers has any use for the word. Why could they not have been content with that alone; distinguishing their varieties by calling them alternatively " halation in the emulsion " and " halation from the support "?

That no one not a photographer understands what halation means seems to be proved by a definition of it given in a popular dictionary which states it to be " a halo surrounding a *dark* object, and causing a *disagreeable, unnatural hardness to the outline.*" How a dark object

can give a halo, and how such a halo could make the outline of the object hard and disagreeable I leave to the pundit who supplied the definition.

The word irradiation *has* however been applied, to scientific ends, in a legitimate way that does not rob it of its proper content. It is used to describe the apparent enlargement by effulgence of brilliant or incandecent objects, such as the sun himself, or an electric filament under the influence of a current. But silver-bromide grains are not seen to be enlarged — they simply reflect.

From this point on, therefore, I must needs use the word irradiation in its proper sense when speaking of effulgence from sources of light in nature, because there is no other term by which to describe the natural phenomenon that is usually supposed to be a naughty trick of photographic physics.

Irradiation proper is a matter of the utmost importance in pictorial art. It is very obvious and ubiquitous to the eye that has been trained in artistic observation. Yet even painters had to learn to see it. Probably there is no example of it in painted pictures before the sixteenth century, although Dürer in his engraved plates adopted it with great significance. Tintoretto, great naturalist that he was, employed it constantly, and Rubens showed the setting sun with rays eating into a belt of trees in a landscape now in the National Gallery. But these were exceptional cases; and it was not until Turner made the effect paramount in his landscape works that the " impressionists " in turn learnt to see it in nature in a way that it had never been seen, or if seen, never represented before.

The impressionists discovered a good many visual appearances that mankind in general had so far been blind to; and simply through them the painter, both by example and by precept, has come at last to recognise irradiation as an indispensable help to his representations of light and effulgence. To others also it must of course be in evidence none the

less; but human vision is largely a psychological process. We see either what we know or what we believe to exist. What we have no use for, or are not interested in, escapes our conscious sight, if not our physical sight. Sailors, sentries, shepherds, and all "look-out" men, see what they know. Emotional folk see what they believe — even to ghosts. What we neither know nor believe in escapes our vision, and only when irradiation is strong enough to force itself upon the consciousness is it noted at all by the ordinary person, and then as an embarrassment which he tries to overcome by ignoring because it interferes with his coveted clearness of vision.

There is a convention of anecdotic picture-making that must have been noticed by everybody. It is that figures supposed to be looking earnestly into the distance are depicted as shading their eyes with their hand. Those look-out men to whom I have alluded are in actual practice given to shading their eyes by their hand. This is for no other purpose than to obscure the effulgence or irradiation from something brighter than the thing they wish to scrutinize, and that brighter thing is usually the sky. Everybody knows the trick of making the hollow fist; that is, bending the fingers round so that the hand forms a kind of tube through which one looks at a particular spot. This, by cutting off divergent rays from adjacent light sources, clears the image of the object under examination.

These practices have been in force from time immemorial, and in all parts of the earth. The healthy savage, no less than the equally healthy ancient Greek, has supplied evidence of effort to disembarrass the vision. The modern painter alone has turned the hindrance to good account, because his investigations into natural phenomena are directed towards what the word phenomena truly means — that is, appearances. All other people are concerned only with solid facts and ideal possibilities of perfect conditions. This all sums up into the general human desire to deny the existence of irradiation since it is an

enemy to clear vision — good sight. Yet if irradiation could suddenly cease as a natural phenomenon, everybody would lack the compelling and convincing evidence of effects of effulgence. In such a miraculous event, to open a window's shutters in a dark room would be quickly to apprise a man that something was wrong. If there were no irradiation, the window would simply be a bright patch like a sheet of white paper — which I have seen it look like in photographs: it would not appear to be a hole letting in light. Yet the same man who is postulated as experiencing this miracle would probably not know what was wrong with things, although he would at any time fully appreciate the luminosity of the great window in Rembrandt's "Philosopher" in the National Gallery.

The question arising at this point is, how much of what Rembrandt saw — of what, indeed, we can all see when we look without mental bias — how much of this does the camera see?

I have been told that the camera sees nothing of it: that it is a result of a defect of the human eye. The argument advanced is that the rays from the bright source, entering the eye, become scattered by the agency of motes in the aqueous humor. There is no doubt that direct rays may; but if that were the whole story it would leave the camera free from all suspicion of this nature, since it has no aqueous humor. Let us see whether we can accept the fact and the deduction.

Let us imagine a window in a room opening out on to a space where there are no light obstructions. Further, let us suppose that upon the wall beside this window — which may even be covered with a thin and diaphanous curtain — there hangs a picture. If we stand, say, to the left of this window and look at the picture hanging on the right of it, we shall but dimly perceive it through the irradiation from the window. A black frame will scarcely be differentiated from a fairly dark wall-covering; the "pattern" of the picture will be with

difficulty discerned; and not at all if the picture has no well-marked contrast.

Precisely the same phenomena appear if we look at the identical objects as seen upon the ground-glass focussing screen of a camera. Will it be contended that it is still an effect in the eye alone? I take it that the focussing screen in this case is recording exactly what the lens will transmit to the plate — not what comes about by a defect in an eye, with which it can have little to do. Moreover, the focussing screen plainly shows that the errant beams have already been caught in their passage from the objects to the lens, and thence to the screen, before they have reached our eyes.

To me it seems that this screen-image cannot possibly affect the eye as the original and actual scene does, because it is in the nature of a picture: it is two-dimensional and can be seen from any angle *as a picture,* in ways that would prevent its light rays from acting upon the eye as the actual light rays from the objects act. What we see is the entanglement of the rays in the granulation of the ground-glass. There are no direct rays such as might cause chaotic conditions in the aqueous humor. We can see perfectly the picture upon the focussing screen from a point considerably to either side.

But I think that the phenomenon for which I claim recognition has very little to do with direct rays. Irradiation is a condition quite different from directness (though, of course, there must be some direct rays amongst the wide and general irradiation). The effect of which I speak is one seen usually from the side of an opening; occurring often in the deep embrasure of a window that is itself not in view. In such cases the inburst of light is obvious round and about the embrasure. If the opening itself is partly seen the effect is, of course, many degrees stronger, veiling window frames, mullions, and leads; door-frames, lamp-frames, and lamp-supports — anything in fact which is within the range of the irradiation. Until recently, any photograph of such

conditions, if taken by a competent and self-respecting photographer, would have had every trace of such irradiation meticulously eliminated. Fortunately, a few of the more enlightened today are eagerly availing themselves of irradiation as a pictorial resource; but they are as yet in a despised minority.

A very eminent photographer of my acquaintance — a man of unusual intelligence and culture — whose name in mercy I withhold, once confessed to me that he had "faked" the mullions and leads of a cathedral window seen from within, in order to make them firm and dark. This is exactly the kind of thing the painters did in the dark ages, being embarrassed rather than delighted by irradiation. The particular photographer alluded to, prides himself, with good reason, on the technical perfection of his work; and to all such *perfectionists,* the phenomenon of irradiation is regarded as halation, and halation as anathema.

Ingenuity has been strained to the point of absurdity for the discovery of a way to overcome halation and with it, of course, irradiation proper. Let me quote a sample of the help given to amateurs in this direction by the photographic press.

A paragraph once appeared that set forth a method of overcoming what it described only as halation, never granting the presence of what I describe as irradiation. "The method,".it stated, "consists of marking with a pencil any windows, etc., on a sheet of tissue paper held against the ground-glass of the camera, at the time of making the exposure. Before commencing development, bits of gelatine or thin celluloid are cut out so as to be just a little larger than the marks on the tracing paper. Development is then started with a dilute solution, and as soon as the high lights show, the plate is rinsed under the tap and the bits of celluloid are adjusted over the corresponding parts of the negative. After a few seconds these are found to adhere, and development is continued with a stronger solution until the rest of the negative

is practically finished. The pieces of celluloid are then washed off under the tap, and the negative fixed, or, if necessary, the negative developed a little further to bring the high lights into correct printing relationship with the rest of the negative."

Halation, I surmise, is due to the action on the plate of any *direct* rays, that is, direct from the light source; for they go without mitigation straight into the emulsion. Their action is admittedly a nuisance; and backed-plates or any other resource should be adopted to counter it.

Quite otherwise is it with the gentle irradiation. This beautiful effect is legitimate and cannot be ascribed to fierce treatment of motes in the eye: it is only just discernable as a revealing of motes in the air. If it is maintained that the lens should not register it, why is the lens permitted to register sun-beams or lamp-beams? Each and all of these phenomena have as much right in a photograph as mist, fog, or steam.

Those who contend that irradiation originates in the eye refer to the following experiment. When we direct the lens to our supposed window and dark wall space, irradiation appears; but it disappears in part, if not entirely, if we slew the camera round just far enough to eliminate the window from the view. The picture on the wall then jumps into clearness of image, depth of tone, and force of contrast. The argument is that if irradiation is not subjective, the dark space should still be shot across by those divergent rays which cannot have ceased to come in at the window because of a movement of the camera.

All this argument does is to put the eye and the camera on an equal footing; for the same thing takes place in the eye if we obscure the window by a hand-screen. The "cutting-out" of the window is almost, but not quite, the equivalent of the hollow-fist and the spying-tube, the lens-hood and the hand-shaded eye, which likewise clear the vision, but do not eliminate irradiation. If we take the full glare of the window into our eyes we get, admittedly, something additional to irradiation: something, in fact, which by contrast of force weakens it.

This is very noticeable in the case of the irradiation from a motor-car which appears to be extremely brilliant as it glows over the crest of a road before the headlights come into view; but immediately they appear, irradiation is nowhere. The direct glare fills our eyes with chaotic light and we can see nothing else.

It seems to me, therefore, that in seeking for proof that irradiation proper is not an actual phenomenon of nature but solely subjective, the theory of the imperfection of the eye scarcely " fills the bill." Nevertheless I am prepared to admit that since the eye is an organ and the camera is not, the eye may be more intensively affected by direct rays and produce the less normal result in such conditions. But in granting this I do not submit to the conclusion that irradiation proper is non-existent with light openings into dark places. I maintain that it is there and that the photograph should show it. I maintain also that the photographer is doing wrong, falsifying nature, and betraying photography when he tries to avoid it. The advocates of " good," or " perfect " photography as the phrase goes, consistently instruct him to avoid it, and he takes endless pains to do so; because both he and they, not recognising the existence of irradiation as a natural phenomenon, conclude when they see it photographed that it is all and entirely halation. By well-known safeguards they endeavour to get their windows and doors sharp in outline, and normal in tone, in contrast, and in detail; and they still call themselves pictorialists. Were a painter to attempt to depict an opening on to a bright beyond without the inbursting of light, or to give the space around full depth of tone and clearness of detail, he would popularly be held to have failed; and his peers would judge him a novice, a primitive. In fact the omission of irradiation is one of the " dodges " of the modern art-primitives who ape archaisms. But to the photographer generally speaking — there are intelligent exceptions — this flower of art is held to be a scientific weed that should be eradicated.

Perhaps natural irradiation is less ruthlessly eliminated from landscapes than from interiors; because its effects are not so pronounced in the open. But if one calls to mind the garden scenes and similar subjects that are made, commercially, for book and circular illustration, it will be remembered that trees and buildings are usually shown as masses of equal tone (apart from light and shade) right up to a sharp sky-edge. This is the requirement for " good " technical photography, but it is utterly unlike nature as the eye sees. What is inevitable in " trade " work, however, is inexcusable in the pictures of the competent amateur, who almost invariably gives himself much trouble to avoid every trace of irradiation in places where it is very obvious to the eye: for example, between tall trees on opposite sides of a shady road. Even in open country, trees should be represented as flooded around with light and air which they never can be without some degree of irradiation from the ambient.

As I have endeavoured to prove, the mind associates the irradiation seen by the eye with strong light coming from somewhere else. Such association is a psychological content that the artist should evoke by his form. The best and wisest artists do so — especially those who are painters and are therefore not troubled by perfect photography and bits of celluloid. The painter, at any rate, takes the human eye with all its defects as the final arbiter in things pictorial and æsthetic. He knows that he sees irradiation and he would not alter his practice if we could persuade him that the camera does not. He, in turn, might persuade the photographer that some residue from halation should be preserved even in the most suspect cases, because that effect alone can represent the true sensation of the eye which the mind of a spectator associates with the idea of living light.

Let us by all means, eliminate true and excessive halation; but let us not scold, as the critics of " beginners' prints " do, nor blame the experienced pictorialist for one of the *virtues* of photography. A refer-

ence to Clarence H. White's picture "The Bath Room" (Plate 56) will prove that an onslaught of light can be in itself subject enough for a picture; and nobody can lament the fact that here edges are eroded by light, and detail veiled. Neither could one with justice deny that the splashing of light from the window-sill in "The Letter" by Amy Whittemore is a delightful phenomenon well captured, and possibly of more interest to an observant student of nature than even the less rare letter-reading. Yet it is not long since such achievements would have been thought most unfortunate (Plate 74).

An example of irradiation more often observed is shown in R. H. Lawton's "Admiralty Arch." The effulgence from street lamps has usually been regarded as a misfortune to be avoided; though to the artistic observer it is a distinct advantage, since it is an aspect of form that carries a most convincing content of luminosity. To represent a luminary without it is to give nothing but a clean-cut white spot that will probably prove meaningless as well as aggressive. Yet it is a curious fact that until quite recently such irradiation was never tolerated. Mr. Lawton's picture, circulating in a postal club, drew a consensus of opinion that the work was hopelessly spoilt by the "unfortunate halation." Why the effect should have been credited to halation is difficult to see; for the light in the subject at its brightest was far more dull than anything would be in the bright spots of an ordinary outdoor view in sunlight where halation would not occur (Plate 75).

COLOUR AND PANCHROMATISM

COLOUR TRANSPARENCIES

THE rendering of the colours of objects by photography and the rendering of the true difference in lightness and darkness of such colours — their luminosity — are two matters that have developed side by side, necessarily. The brilliance and beauty of colour transparencies, and their more obvious truths of statement, have filled most people with complete trust in the advancements of science on these lines, so that it is generally speaking taken for granted that colour-sensitivity in emulsions has produced results that may be accepted with as little hesitation as the Ten Commandments and the axioms of Euclid. This simple faith — be it justified or not — has brought home to the " plain man " the tremendous truth that tone and tone values are as much matters of colour as of illumination.

The plain man of photographic leanings is likely to think himself so well provided for now in these matters that he can proceed free from all care, thought, or further investigation. In his confidence he does not question results for one moment, nor could he do so with any competence. But it is different with the photographer who has artistic aspiration and to whom observation and deduction is a habit of mind. To such the investigation of colour-sensitiveness in photographic emulsions is a path beset with traps and pitfalls. Let us suppose such a man to be an artist with a naturally keen colour-sense. He will first be struck with the fact that almost all the colour-photographers' examples are in the form of still life groups. This is a significant fact. It points

directly to the average person's idea of colour — an idea that does not rise above the level of matching the tints of wools and wafers. " Can you beat that for a banana? " says the proud enthusiast displaying his autochrome.

The artist, having long passed the stage of thinking that bananas or anything else have a particular tint which must be matched in order that identification be safeguarded, knows that " local colour " is a mere phrase; and that, theoretically at any rate, such a thing as local colour does not exist. An object is any tint that the light happens to make it, and the light is illimitably variable. Therefore all discussion upon the " correct " tint of objects, whether they be bananas or billiard balls, satins or skies, can only amuse the painter; for he has another idea of colour altogether. To him, colour is an effect — a result — to which the so-called local tints or self-colours of objects in a view merely contribute. As, to him, the most intricate and engaging displays occur where there are most factors at work, he will reasonably expect to be shown studies of outdoor colour problems, rather than flowers and fruits in a simple indoor lighting. The latter are beautiful, of course, but they do not furnish proper tests of the degree to which colour photography could succeed with the greater demands of complex problems. Landscapes there are, in plenty, but they are almost invariably approached in precisely the same way and with the same mental objective as are still life exercises. Next in order of popularity come portraits; and in this *genre* the photographer himself is so far alive to the vagaries of light that he endeavours not to play any tricks with his darling " flesh-colour " — which to him is as much a constant and recognisable factor as banana-colour. The garden scenes and greenhouse vistas are additional proof that " local tints " are to the photographer the final and cnly test of what can be done and what is worth doing in the way of pictures of this kind. Whether so limited a view of natural colouring is partly due to the pronouncements and examples offered by the scien-

tists; or whether the scientists themselves, being theoretically antithetical to the artists, share the popular notion that the colour of a thing is what its material substance refuses to absorb from white light, no one would dare to say. But it is presumable that if this limited and rudimentary idea of colour-matching is really the basis of research and experiment, the day has not yet dawned when colour photography can be of much interest to nature lovers and picture lovers, nor of much interest to painters. Tint-matching is a kindergarten exercise. The painter is in a hopelessly elementary stage who sets out to do it, and his pictures would be as hopelessly neglected if he did. What he seeks is something in the light as it falls — something that charms perhaps because it renders things *less* prosaically recognisable. That is why the landscapist prefers to go out of doors where the changes and modifications of light are innumerable and continuous. There the sun, the sky, and reflections all play, with lights that are differently hued, upon everything; and the things themselves vary in texture by movement of their own and by movement of the air acting upon them. Change of texture means change of colour. To think of local colours — even of "flesh-colour" — in such conditions is futile, for in the open one never sees colour twice alike. When, therefore, the artist hears the sedulous photographer castigating himself or his plates because his trees are too green or not green enough, he smiles, divining that the photographer's notion of tree-colour corresponds pretty closely with that of flesh-colour and banana-colour.

All this is, of course, negligible to the scientist pursuing his researches, who necessarily must deal with basic principles and essential facts. The artist has nothing but admiration for him. It is the undiscerning photographer of whom he falls foul — the person who applies unwittingly and confidently these means which are beyond his power and capacity to use and which prove to be two-edged tools in his hands. If the artist has any quarrel at all with the scientist, it is at the point

where the receptivity of colour sensation in the eye is postulated and laid down axiomatically.

The "curves" that Abney, König and Dietrici, and others have submitted as representing the colour-sensitivity of human vision have to be taken on trust by the average person — indeed who else but the pundits themselves would have knowledge enough to refute them? But the average person here and there is subject to a qualm of uncertainty in finding that these curves all differ one from another. He wonders after all whether the scientist is necessarily the ultimate authority who should pronounce upon such matters: whether the artist whose whole life is devoted to colour-observation and whose organ is attuned to its stimuli is not the more fitting person to discriminate in so delicate a task as fixing the curves of human colour-sensitiveness.

The fact that the solar spectrum viewed by the eye appears brightest at the yellow portion is assumed to be sufficient ground for the declaration that the human eye is more responsive to a hue of yellow than to any other hue. This assumption has become a postulate for theories and a starting-point for experiment. What if it is not actually true? If the eye sees the yellow section of the spectrum most intensely, what is proved is that of all the separable rays in the sun's light those that are numbered in charts as of 5,900 units exert the most stimulative energy in the eye. But this stimulative energy is *luminosity*, not *colour*. The actual yellow is not more yellow than the blue part of the spectrum is more blue to the eye — probably less so, since the brighter the yellow the less yellow it is and the more white. The colours of the spectrum are seen by transmitted light; but the colours of ordinary things are seen by reflected light — a condition which affects "energy" pretty considerably. Yellow and blue, which are complementary and antithetical, are both affected, though in opposite directions, by illumination: particularly so when seen by reflected light. The brightest yellow flowers become degraded in hue almost to the point of disappearance

when we see them in the garden at evening, while those that were deep blue in the sunshine become so pale in the gloaming as to be indistinguishable from white flowers. This is one of the phenomena of the " Purkinje effect."

There is, moreover, a peculiarity with regard to yellow. It seems to gain its glowing intensity, in a greater degree than do other hues, by increase of illumination — as embers glow to a flame by the stimulus of the bellows. To the painter, yellow is the first step down in brilliancy from white. The things that glare unpleasantly about us are the white things when they tell as sharply contrasted patches, and next to these are the yellow things because of their almost equal violence of assertiveness. Turner, in appreciation of this peculiarity, painted his suns by circular zones gradating from white through the yellows to the lower tone of the surrounding sky, and nobody has made suns more incandescent. Painters in setting their palettes observe the same order of yellow next to white. In all this it is not the mere hue that is concerned. There is some physical reason for yellow energy that should perhaps be sought in subjective conditions: some peculiar relationship between the wave lengths from 5,000 to 6,000 and the cones and rods of the retina. Colour is born in the eye, and there is no obligation to believe that it exists anywhere else.

Our artist, at any rate, examines the reproductions of the prismatic spectrum colours upon which laboratory work is founded, and finds them usually unlike that incomparable spectrum he knows in nature — the rainbow. He asks whether the spectra of the laboratory which seem to have preponderance of yellow, in respect to both hue and brilliancy, are not those of artificial light; and whether the spectrum formed by diffraction is not as valuable a basis for theory as the prismatic spectrum.

In our lectures and demonstrations all spectra are projected by a lantern, and doubtless laboratory work has for reasons of convenience to be similarly conducted; but the artist does not feel content about it.

If our researchers could go out into the open they would work in conditions that are generally and typically those of human vision. Perhaps in such circumstances the dictum would not have been made that the human eye is chiefly sensitive to yellow light: a fact that finds no confirmation in the rainbow, where the blue and blue violet are as strong as any other sensations.

Of Lucrece, Shakespeare says:

> And round about her tear-distained eye
> Blue circles stream'd like rainbows in the sky.

The doubt also arises as to how far these pronouncements upon human vision are the outcome of individual research or of mere repetition from one "authority" to another. And with that doubt in the mind comes the further question as to the justification of the original authorities in matters of colour appreciation. At the best they could but have judged from *their own* vision. All references to witnesses for confirmation have been proved of little value since the human equation introduces too great a mass of modifying factors. Natural sensitiveness, shyness, over-excitability, imagination, self-doubt, inaccuracy of verbal expression — these are but a few of the complicating factors that have rendered research into questions of æsthetics by means of a *questionnaire* a complicated failure. Yet without some such method an investigator is reduced to the one report of his own consciousness which may be equally a prey to the same psychological handicaps. The authorities themselves have admitted to "retinal fatigue," the "Purkinje effect," and other physiological and physical embarrassments which have to be recognised in computing results. Yet we find in text-books a kind of parrot-cry of statements that are entirely opposed to human experience. For example, speaking of yellow; "it is the colour which appears brightest in feeble luminosity, and green is the next." Here is a brace of statements in diametric opposition to the truth. Green is

the first colour to become grey by failing light. Again: " If the light is very feeble all bodies appear equally black." What does that mean? These two gems of inaccuracy are culled from a book for students. Would not students be better advised to test things like this for themselves instead of taking them on trust and handing on the errors?

When all this is borne in mind the practical value resulting to the pictorialist seems a little doubtful.

It is, of course, for the advance of industry and commerce that scientific research is prosecuted: a fact that doubtless justifies the scientific mind in stabilising colour-appreciation in vision as something *absolute;* although any good and thoroughly observant painter of pictures would contend that visual colour-appreciation is entirely *relative.* He would not even attempt a consistent nomenclature of colour, and many a person is surprised when asking him what he calls a certain hue or tint to receive an answer like: " Blest if I know! "

To the artist it matters little what the precise colour of things in pictures may be so long as they are properly related. Truth and charm in pictorial art come by way of psychological conviction, not exact imitation. In any case the exactness would always be open to doubt, but the emotional conviction is the easiest thing in the world to evoke if only the artist sounds the chords in right relation. It is for reasons like these that photographic colour transparencies so seldom approximate, in the artist's regard, to veritable pictures.

The light that leaves objects for the eye is usually of a different colour from that which is regarded conventionally as the local colour of these objects. And it is this light, tossed about in the air by diffusion, diffraction, and scattering, that really matters to the pictorialist. He does not look for green leaves — chlorophyl is the botanists' concern. He attunes his eye to the light of the sky that falls upon the leaves and becomes at a certain incident angle, and by reason of atmospheric conditions, not green at all but possibly something approaching a purple;

or if the sun shines through verdure, a brilliant yellow-green; or if the wind stirs the leaves, a grey. The sum of these influences may make a tree, at a little distance, present a tint for which there is not a name. Along sweeps a shadow to envelope it and it becomes practically black: certainly not the green of the leaves as they might be photographed within doors in a vase.

The greatest fascination in outdoor colour to the artist is the general opalescence of a view. This is partly atmospheric and partly due to the cross-lightings of sun and blue sky. We are told that sunlight is white. Doubtless it is when the luminary is high; but the sky fills the air with blue light in contrast to which our eyes proclaim the sunlight of a yellow cast at any time.

Taking all things together, the assumption that light is made up of actually coloured rays seems feasible as a working hypothesis, but it surely does not justify the making of dogmas as scientific bases regarding human vision; and it is perhaps not unreasonable to think that the particular dogma that the human eye sees an excess of yellow and too little blue will ultimately be revised. Experience does not bear it out. Colour is too elusive a thing to be so simply dealt with: it changes objectively by a hundred influences, and subjectively in ways as yet beyond the ken of physiologists and psychologists.

So far, the colour plate has not proved itself equal to capturing the charm of opalescence in landscape; for this quality is too subtle for the small scale of the plate viewed as a transparency, and seen by lantern projection it is killed by the mechanical colour elements of the plate.

COLOUR LUMINOSITIES IN MONOCHROME

In spite of the infinitely variable conditions of colour vision, the rationale of the " panchromatic " plate and its filters is founded on factors which are claimed to be constant.

The task of the pictorialist who works in monochrome is not the

more simple, but the more complicated, for it involves an additional mental process in becoming a translation from the language of colour into a language scarcely allied — that of lights and darks.

A scheme of lights and darks should be pleasurable to look upon in more ways than one. It must form an agreeable arrangement of chiaroscuro, as already discussed in a former chapter. It must make good designs by employing not only the facts of high-lights, half-tones, and cast shadows, but the brilliancy and dullness of the colours of things: in other words, their tone values — a very difficult and disputatious part of pictorial art; yet not more elusive to comprehend nor more difficult to seize by the monochromist than the colour contrasts in objects. This colour contrast is a facet of monochrome art little understood by photographers, who in later times have fallen under the spell of tone or luminosity values as rendered by " panchromatism ", which is inimical to colour contrasts.

The ordinary plate of earlier days rendered tone values in a way of its own. It may or may not have been a scientifically sound way judged by the standards of more recent researches into the facts of colour-sensitiveness of emulsions, but it produced excellent landscapes, many of which have not yet been surpassed for truth and beauty. The wet-collodion plate is said to have been colour-blind, yet some eminently artistic workers produced fine results with it. How did they do so? The explanation lies in the fact that the variable lights which fill the air; which glance upon objects here and shoot off to others there, are by reason of absorption, diffusion, and transmission mostly of a blue-violet tinge to which the old plates were efficiently sensitive. The more modern " ordinary " plate is likewise responsive to these rays of shorter wave lengths, and in a similar manner will render a reasonably pictorial result that will satisfy both artist and nature-lover.

" Orthochromatic " plates, which have been in use for about half a century, are likewise sensitive to blue and blue-violet light, but by

having a dyed emulsion they also respond to light waves of a greater length, chiefly the yellow-green rays of the spectrum. They are thus able to make a claim to rendering the colour values of objects, more or less; but their fitness for pictorial effect and design is still mainly supplied by their superabundant sensitiveness to the blue and blue-violet light diffused throughout the atmosphere and reflected from the surface of objects. Still additional sensitiveness for photographic emulsion has been achieved in the panchromatic plate by further discoveries in staining with dyes; and to this has been added the resource of light filters of yellow transparent material in various degrees of depth, as well as of other colours for special purposes. The function of these filters is to stop certain light-rays from reaching the photographic plate; those rays, in fact, that are complementary to the colour of the filter. Yellow filters therefore are made to " cut out " blue light for the reason that all photographic emulsions are said to be more sensitive to the rays at the blue end of the spectrum — the short wave-length rays — than is the human eye; and it is definitely claimed that the panchromatic plate, used with a K3 filter, is capable of giving an image of a coloured scene in a monochrome rendering exactly corresponding to the monochrome rendering which the eye would give — if it could.

There exists positively no way of either proving or disproving this statement, which therefore remains in full possession of its own laboratory-issued credentials. Before going any further, however, let it be admitted that there is no question of the value of the aforementioned assumptions and dogmas, nor of the brilliant advancement in knowledge and practice which they have made possible in the departments of industry and commerce. The panchromatic plate and its filters can bring about the most useful and coveted inaccuracies, distinguishing to any extent by areas of lightness and darkness the colour markings of objects even when they are scarcely or not at all evident to the eye. This power of " picking out " is in fact the chief glory of panchromatism.

It is a resource of inestimable value in scientific research as well as in commercial work. It has wrested hidden secrets from documents of all kinds, and has made possible the exploitation of vendable merchandise in ways never before approached.

The scientists' pronouncement that to the eye yellow is more brilliant in the solar spectrum than is blue has already been put in apposition with the fact that the eye does not endorse the dictum in the case of the rainbow. But no breath of suspicion attaches to that dictum which is now canonised irrevocably. On the strength of it the poor trustful photographer employs his panchromatic plate, placing before it his yellow filters to any degree of depth: the deeper the better he thinks, since he means to " cut out " at all costs that wretched blue which he is told he does not see. As to the artist, he knows that for him blue is everywhere. In the old days of painting it was so firmly recognised a factor of vision that it was deliberately countered by excessive means of getting pictures warm as an æsthetic corrective to the prose of literalism. Today the fashion has changed. Yellow and brown pictures are anathematised by the modernists because they are old-fashioned and conventional; purples and blues now hold the field, as any collection of modern pictures proves. All this may be evidence only of the vagaries of fashion, but it is an argument that vision has no favourites among colours in practical sight.

And those filters — for what light are they calculated? It has been stated in the press that their laboratory origin presupposes a homogeneous or monochromatic light; but if that supposition be well-grounded can such light be always available when the plates are put to practical use? There are no " gas-filled " lamps to light landscapes, in the domain of which even daylight and sunlight change from hour to hour, not in intensity only, thus altering the colour of things, but in their own intrinsic hues — respectively, a yellowish hue in sunlight and a bluish in daylight. To which does the filter address itself?

Or, to take the very arbitrary matter of exposure, is it not a further complication to double, treble, quadruple, or further multiply the periods of exposure because of a part-elimination of short wave-length rays, when it is known that colour contrast varies with illumination. What may be correct for a filter at one time of day is incorrect for another time of day, but you cannot make your filter pick and choose within a given set of factors. It is on record that excellent flower studies were made by an old-time worker who waited till half an hour before sunset before making his exposures — proof that the exposure factor of a filter cannot be stable and trustworthy for variable out-of-doors work though it may be correct to a nicety for the laboratory, the studio, or the workshop. And it is very easy to upset the niceties of panchromatism by wrong exposure, since less than the normal time will give the appearance of " over-correction," whilst more than enough admits flatness of effect.

It does not seem safe to assume that with such a delicate and complex matter as this, wherein eye and emulsion are differently responsive to a host of varying factors, three grades of a yellow filter, at the choice of an average person who is perhaps entirely uninitiated, are going to solve the elusive artistic problem. We have heard of other colours than yellow for filters being used in landscape, but fortunately their commercial availability is negligible, or we should see some surprising pictorial results.

One of the important claims made for screened panchromatic plates is that the green of trees is rendered as light and not " black " as with the uncorrected plate. This sounds most comforting, and those who are thus comforted will doubtless remain content with the authoritative dictum. But in the first place, is it correct to say that the ordinary plate of any period rendered trees as black? In the next place, why set out with the idea that trees are always green? The mere mention of the " green of trees " betrays a very conventional idea of true colour

in nature. Even admitting for the sake of argument that in the month of June (in England) trees are all positively green, it is demonstrable that they are of such variety, and approximate so nearly to other tints than green, that any colour-sensitiveness of a plate arrived at by way of filtering might not render correctly more than certain small areas in a group of trees.

Nobody who has a habit of observation can be satisfied with the generic term "green" as applied to fields and verdure, as it might apply to a billiard cloth. Before and after June (in England) the countryside is still further removed from this generic local tint. Fields when the grass blooms are red and grey and yellow; trees are plentifully modified by browns, reds, yellows, and purples, to say nothing of the atmospheric and texturous changes of colour already alluded to. But if we keep to the leafy month of June there are sufficient colour complications in other parts of a scene to make filtering a doubtful advantage. As these words are written, on a June day in Surrey, the sun is brilliant, the sky is blue and graced with great shining cumulus clouds. Through the open window a clump of luxurious elms is seen in full sunshine; but in comparing them carefully with the blue sky (not the clouds) in regard to tone value they are found to be extremely low in tone, whilst the blue is many, many times higher in tone than they. Of what use then to an artist is the record of a filtered plate that *reverses* this order of things, and does so excessively?

One can only account for the photographer's approval of this reversal by concluding that there is first, a general lack of proper observation; next, that photographers work upon authority and not by conviction; and in the third place, that their ideas of sunlight are limited to a play of direct light and shade upon objects and do not extend to a general effect. But trees, at any rate, are not contrastingly cut up into strong lights and darks as the filtered plate renders them when caught by a side-lighting.

It is not necessary to dilate upon bright blue skies rendered as black with white clouds in them. This fault is at last recognised, and today we find photographers admitting to " over-correction " quite readily. This matter has already been dealt with in the chapter " Concerning Skies " and also to some extent in that of " Monochrome from Colour." All that is necessary to state here is that the filtered plate has confirmed as many wrong ideas about tone values as it has introduced new ones. It has popularised besides high-toned vegetation, the intense modelling of clouds so that they look like plaster-casts photographed in a single concentrated light; and owing to the prestige attaching to this sort of thing, the more truthful and beautiful aspect of the comprehensive high tone of any complete sky has lost ground.

If any one will take the trouble to look carefully at the blue sky between clouds, confining his attention to that *lower part* of the sky that usually comes into a picture, he will find that the modelling of clouds is a matter of exquisite delicacy — the differences of tonal strength being infinitesimal when compared with the modelling of things on earth. The whole heaven is — except when thunder clouds are in heavy contrast to brilliant lighting — many times lighter than the whole earth. But the blue sky is still lighter than the darkest shades of the clouds in the lower section of sky that comes into the average picture. If this cannot be endorsed by the observer it is perhaps because he is obsessed by the *colour contrast* between sky and cloud and cannot detach his mind sufficiently to gauge the luminosity of the blue with accuracy. But any good and experienced landscape artist will bear out this contention (young students are of no use in this connection).

What the pictorialist requires is what the eye sees of luminosities, not what may be the measurable actinic luminosity of things; nor the calculated responsiveness of a plate to degrees of monochromatic light, for he has to do with the complex light of the open air.

In regarding nature the eye is chiefly conscious of the broad colour

contrasts, and the monochromist should preserve them in his translation. To reduce them to nothing by methods which give only their luminosity values is to concentrate on the wrong thing and emasculate the picture. Where the eye does rejoice in luminosity values is in *direct* light, be it from heaven, the sun, the moon, or mundane luminaries; but in reflected light from other things these values are too low and negligible to have any emotional interest.

The landscape photographer must cure himself of a propensity to deep filters. It is seldom that the lightest grade is of more than doubtful advantage, and the panchromatic plate itself is usually adequate for all the correction desirable in these directions. From the point of view of tone contrast the light tone of trees that in a general or frontal lighting results from too deep a filter is an artistic mistake: from the point of view of colour value it is incorrect.

There is every argument for the proper recognition of *colour contrasts* as they are suggested by monochrome. Trees that are shown a few degrees lighter than the skies behind them cannot possibly suggest the richness and depth of colour that the eye sees in them; and it must never be forgotten that colour differences are far more apparent to the eye than the luminosities of colour and therefore are more appealing in a picture. As an illustration of this fact I have been permitted to reproduce two views of the same subject; one by Chris J. Symes and the other by W. H. Gleave. The first is made with the help of panchromatism, the other is not. To my mind Mr. Gleave's view more feelingly catches the spirit of the scene in suggesting the colour contrasts than does the other with its lighter tones and flatter general effect. It is the deeper range of contrasts with which the pictorialist must work at all times if he would secure relief and variety. No one can get an effective design out of a series of greys. Another characteristic of panchromatism in landscape is here noticeable in a lack of aerial perspective. The planes of the filtered result seem to recede only by reduc-

tion of scale; but that is linear perspective. The big trees might be little shrubs growing on the wall of the bridge: the foreground is curiously two-dimensional. In the other picture the mountains really look far away; the lake gleams; the sandy patches and paths are differentiated as they are to the eye; the trees in the middle distance keep their place and look big; the bridge has a breadth of roadway, its archway being "practicable"; and the foreground stones are likewise three-dimensional. As to the spirit of the scene, this view of Mr. Gleave's emphasises the lake and the bridge, respectively; the other has no emphasis anywhere. That the lake was the first item of importance is proved by the fact that a party of people climbed to the spot where it could be seen and then stopped; and that the favourite view-point in this locality was the spot at which the bridge came in with its foreground interest could be attested by many photographs taken on the occasion. Mr. Symes's filtered result seems to me curiously like a painted act-drop. What is the advantage? These examples afford most valuable comparisons, and they have the further fitness as illustrations to these arguments in the fact that they were both taken in my presence. I remember the pictorial conditions well because I was sketching the same scene from the identical standpoint at the moments of exposure — Mr. Symes standing immediately before me and Mr. Gleave immediately behind me on slightly higher ground. It would be possible to give many other examples to show that in landscape work the *visual* tone values of blue skies, green trees, vaporous distances and other items in a view are by no means more nearly approached by the filtered panchromatic than by the ordinary plate (Plates 76 and 77).

Is it not reasonable to assume that the cutting out of the blue and the blue-violet by yellow filters is carried further than the vision of man warrants? And the belief that our appreciation of blue is far behind what is recorded in the plate — is it founded upon any trustworthy natural and practical tests? Refraction and diffusion in the atmosphere

is the commonest of sights to the eye and is unknown to the filtered plate whose mountains invade the foreground; whose planes refuse to detach — why? Because the blue light which would retain them in their appropriate places, and which is a joy to the eye and one of the secrets of Nature's loveliness, is removed.

All this is but a rather expanded warning. It is not denied that some of our most skilled and artistic picture-makers aver that they always use colour-corrected plates. But if they use filters with them for landscape it is only the palest variety that is employed, and for the most part they use none at all. There are others, however, who employ deep filters consistently. They are pleased with their own work and believe in it: they find it honoured and acclaimed. In such circumstances it is doubtless futile for an author to be nothing but a voice in the wilderness.

PERSPECTIVE

PROBLEMS in perspective are an evergreen subject of discussion in photographic societies. Why this should be is not very obvious, because there is no controlling the perspective of a lens when once it is made, and one would think that what cannot be cured might be endured pacifically.

To the photographer the importance of perspective is bound up in distortion. When his lens, by being abused instead of used, produces pictures that so wrench objects out of their shape as it is known to the eye that even the photographers themselves dissent, then the fault is rightly classed as bad perspective. Some misguided individuals delight in finding unusual standpoints. To photograph ordinary objects they get into positions that no sane person would get into for any purpose. Statues have been photographed from the back, the lens having been pointed upwards beneath the hero's coat-skirts. Buildings are frequently made to look as though they were collapsing.

It is claimed that such presentments are true if only we will examine them by placing our eye where the lens was when the photograph was taken.

There is much virtue in that "if." People of average intelligence and taste are not much interested in trick pictures. They like to see their photographs without getting up from their chairs, or pressing their noses upon them, or standing on their heads. And they are perfectly right when they maintain that perspective is wrong whenever it *looks* wrong. For a picture is a thing in two dimensions; actual objects are things in three dimensions. There is no necessity, within reason-

able bounds, to get into any peculiar position to see the proper perspective effect of what is on a flat paper or card. We are not looking at the object represented, but at the representation of it, which will retain the same relationship of parts as far as the understanding goes, from any angle. Indeed the set of optical factors then in operation differs from those which operate in seeing solid objects.

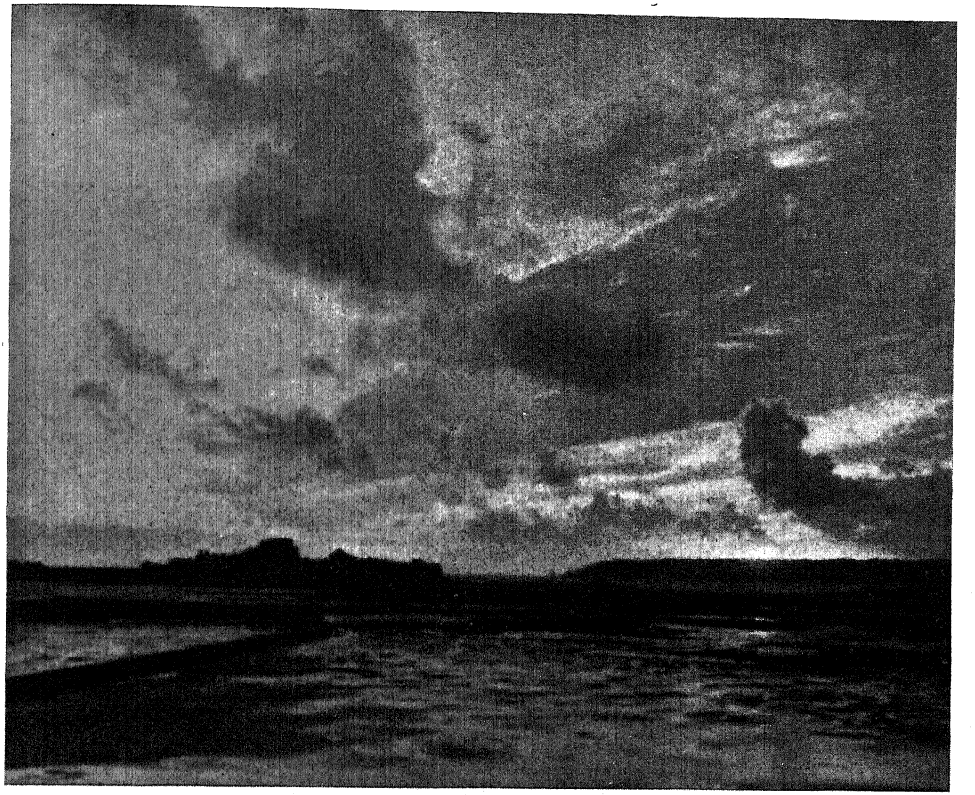
But with regard to the twin towers of a church seen from below there is a legitimate question as to how far they should converge if photographed reasonably with a level camera, and without an attempt to do something funny. It is the perennial question in perspective: Do vertical lines "vanish"?

Perhaps it is not necessary to explain the term "vanish," but briefly it may be said that in nature as well as in pictures, parallel lines extending away from the spectator would meet at a point, if taken far enough; and this converging to a point is called "vanishing." Sometimes we hear it emphatically stated that horizontal lines which are parallel with the picture plane (or the bottom edge of the picture) would also vanish to right and left if taken far enough, but that vertical lines never would.

The confusion here is in saying "never would" instead of "seldom do." For in the graphic arts it is not considered good form to make them do so. Drawings and paintings have always rigidly adhered to this convention — although "modernistic" works (which really do not count) no more observe this convention than any other. Nevertheless, perspective from first to last is nothing but an immense and hoary convention, made absolutely necessary by the fact that there is no other way of simulating human vision. We cannot possibly represent solid things on the flat except by assuming that only one eye is looking at them and that it is inexorably fixed. Even then there is the great discrepancy between seeing all points distinctly in a picture and in seeing only one small point distinctly as the eye does that is dead still.

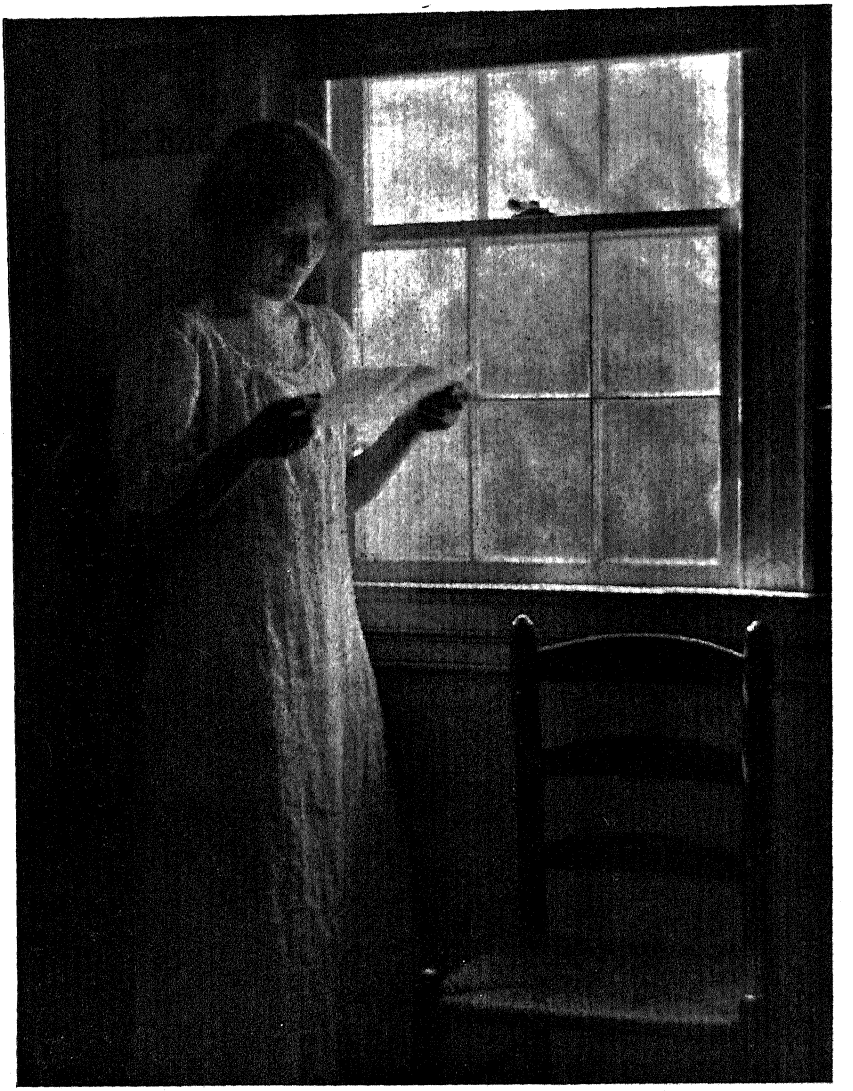
As already explained in foregoing chapters, the eye normally is never still; it comprehends multitudes of points by jerking in all directions to take them in turn, which means that every point is a new centre of vision for the scene viewed. But a picture cannot have more than one centre of vision if it is to be properly understood. We are therefore back at the old difficulty of the difference between actual vision and any means adopted to represent that vision, whether it be by the draughtsman's hand or by the camera. Perspective, therefore, cannot claim to be true, however cleverly it is worked out, because it gives lines and points according to a system which is foreign to vision. Even putting aside the one centre of vision idea, there is still the anomaly that the farther the draughtsman goes from that central point the more unlike vision his drawing becomes. Worked out far enough, say to the edges of a very widely represented scene, the system results in extravagancies of form that strike the least observant as ridiculous. No artist has ever been able to draw the circular capitals of columns, or circles in a pavement when they occur far to the right or the left in a wide pictorial view. The human eye has never beheld, nor ever will, things in such relative positions; they are too removed from the centre of distinct vision in the eye, the fovea; approximating in fact to that part of the retina where indistinctness finishes vision, the ora serrata.

When we wish to see things extremely to right or left we turn our heads, and then we see them clearly as centres of a new picture with a different system of perspective. With objects less far to the right or left it may not be necessary to turn the head but only the eyes; in which case the perspective system will not alter. This is a fact so little understood and so seldom admitted that some substantiation of it becomes necessary. The retina receives pictures but has nothing to do with the making of them. They are made by the lens and varied as to perspective by the standpoint. Perspective is not altered by the rotation of the eyeball because its parts remain always in the same " spherical

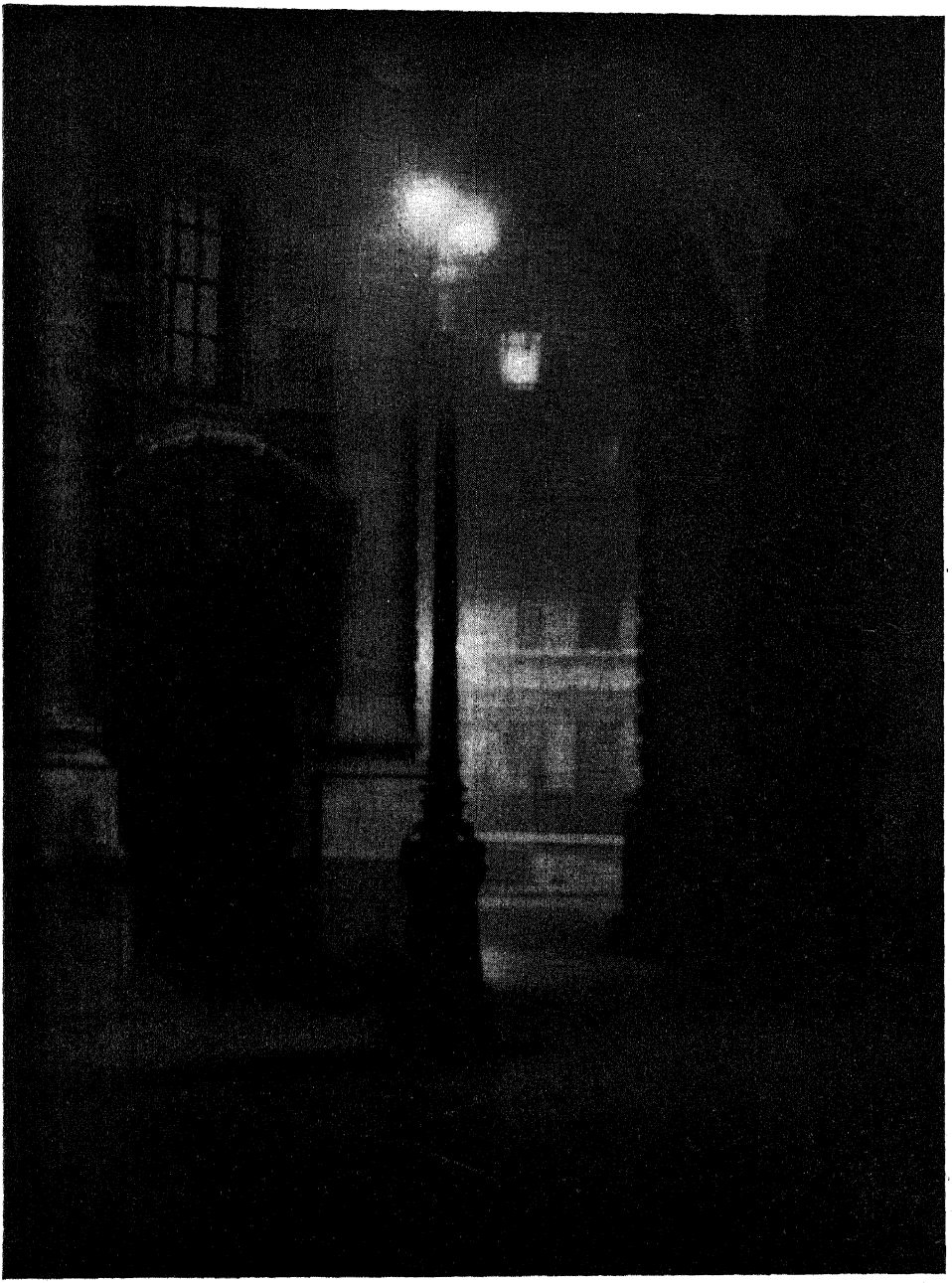


SUNSET, JERSEY — Fred Judge

PLATE 74

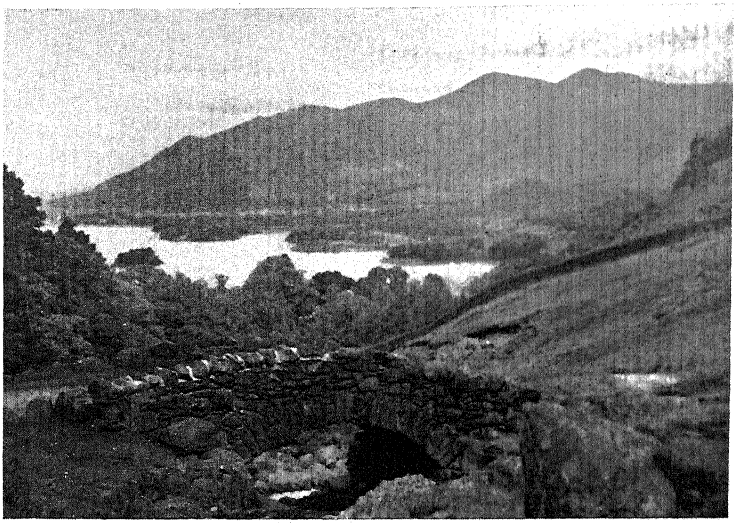


THE LETTER — Amy Whittemore



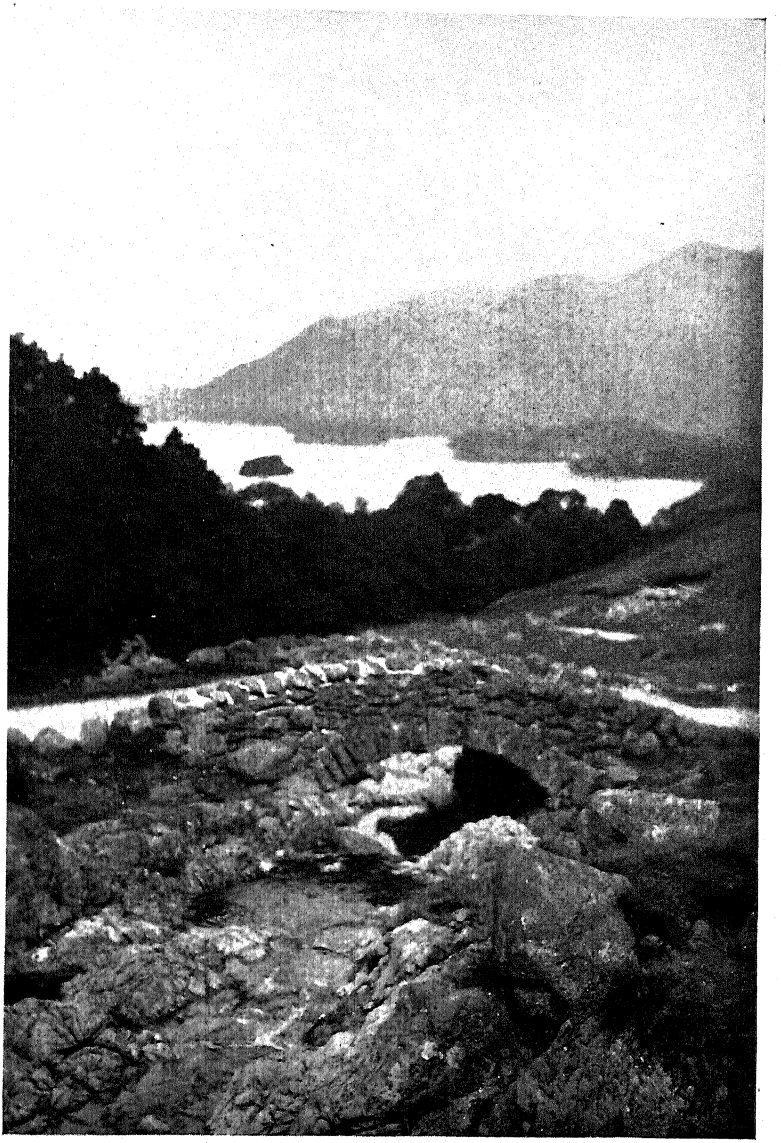
THE ADMIRALTY ARCH — NIGHT

R. H. Lawton

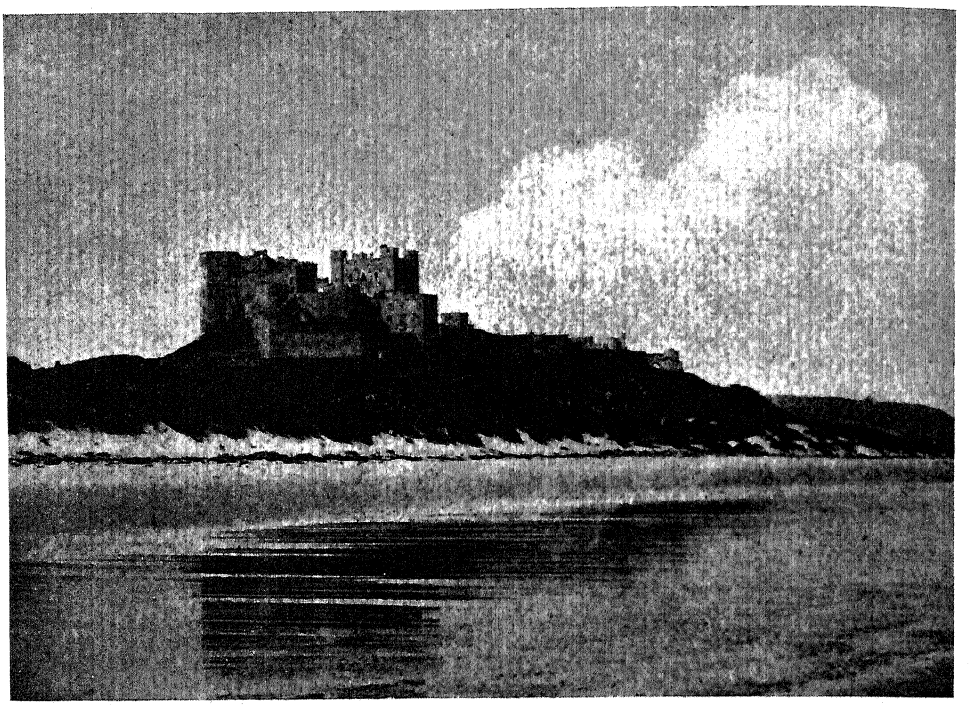


DERWENTWATER — Chris. J. Symes

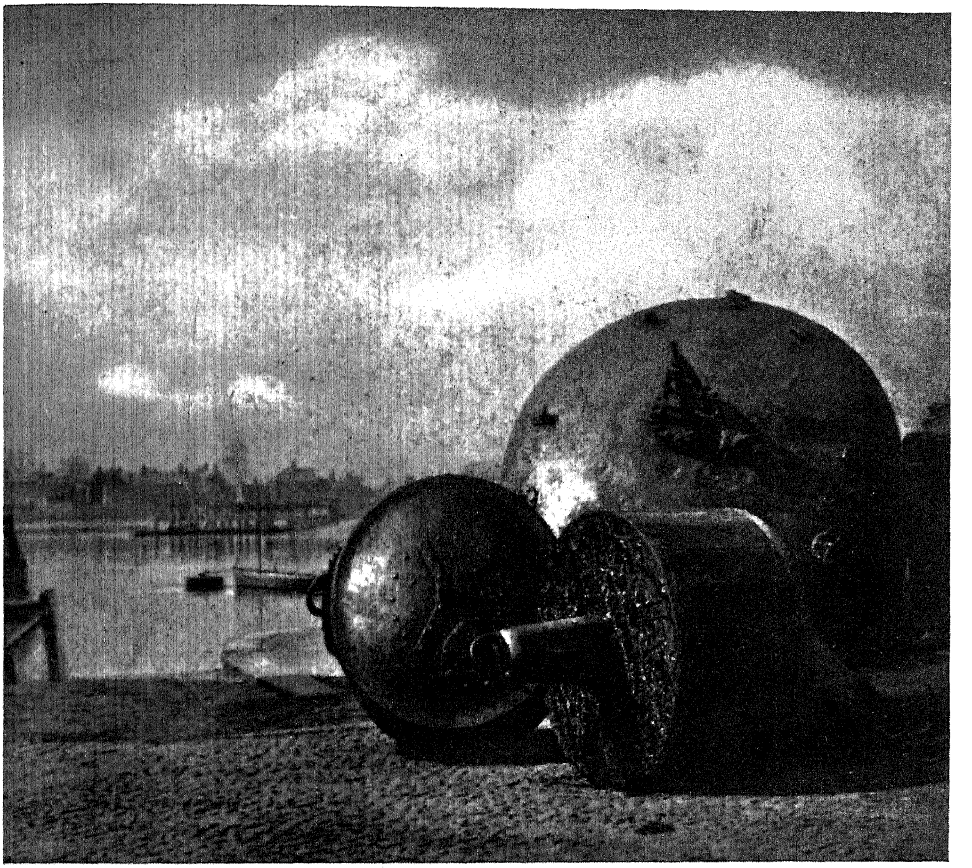
DERWENTWATER, UNFINISHED SKETCH — F. C. Tilney



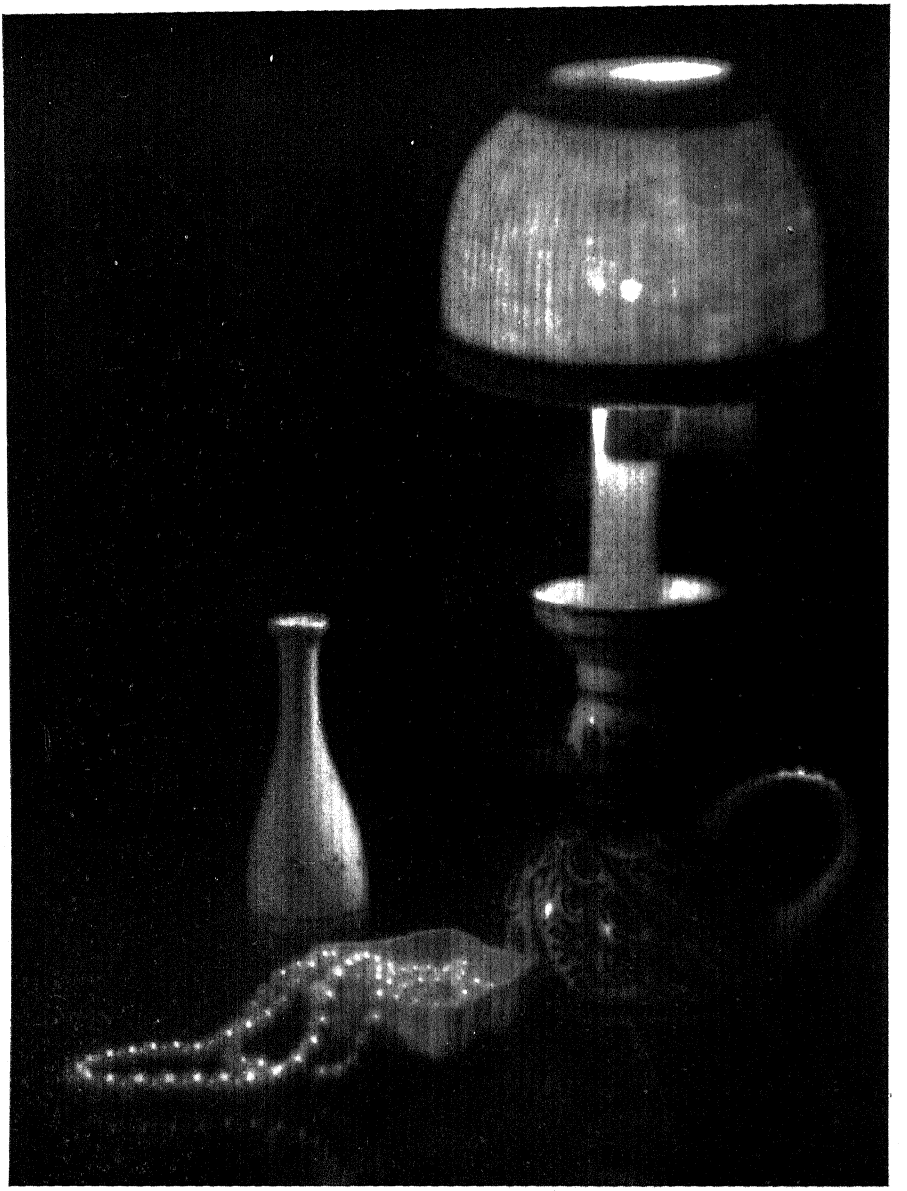
DERWENTWATER W. H. Gleave



KING IDA'S CASTLE — J. Harold Leighton



BUOYS AT LYNMOUTH — Bertram Cox



By Candle Light — Ranald Rigby

plane." But a movement of the head changes the eye's place in space and thereby alters the spectator's standpoint. With the head fixed, all that the rotation of the eye does is to bring successive spots of the projected image on to the fovea. It is very like what happens at a cinema when a document is pictured and moved up so that succeeding lines come into view. The document itself shows no change; the change is in the visual concentration.

As the eye alters its range by rotating, every direct or axial ray that enters the lens is the one that happens to be able to shoot straight in undeflected through the pupil. That which is axial at one moment is oblique at another; but that alternation does not affect their direction, nor the position of objects from which all rays come; shifting of the center of rotation alone can do so; and the slightest movement of the head thus alters the relationship between the spectator and the objects he views.

The laws of perspective allow us, within the limits of the fixed head, to draw our capitals of columns as well as the awkward circumstances permit, and we may get something of an idea of what their appearance would be even farther out of range.

The photograph does not see eye to eye with us here at all. In the same conditions it would begin to show a distorted ellipse in the case of a circle like the " collar " of a column. In the case of a stone ball on a gate-post to the side of a view it would show an ovoid shape. And photography gives itself away more obviously here than in its treatment of circles, for no human eye ever saw a sphere as other than a sphere if it continued to see it at all. The contour of a sphere *cannot* change in vision; it must always remain a circle.

It is easy to see, therefore, that a painter who attempts to portray circles and spheres out of the range of vision of a fixed *head* has only the movement of his eyes to help him. If he attempts anything beyond that limit he is in the realms of imagination. He may work out his

perspective lines and arrive at something atrocious which may satisfy him as to the proper shape of a square in that position (if anybody could see it) but when he attempts to fit a circle to that square he can arrive at nothing that looks right.

All this shows the futility of claiming accuracy for representations of three dimensions by means of two. We accept what has been done, and will yet be done, when it conforms to the conventions of art and therefore *looks* right; but that is the only standard the western mind can use. The mind does not know the real truth of many problems for the reason that the eye cannot apprehend them; so that actual vision and plane representation are really different things, chiefly because the former has no fixed centre of vision and the latter always has.

Since the eye must necessarily know the contour of a sphere as a circle whatever view is taken of it, and since a circle must always foreshorten to an ellipse, there is reason in so representing them in all positions when they are wholly within the picture; and this is done by draughtsmen whenever conditions permit; but if the curves are to be combined with rectangular shapes, as in capitals, the plan will not work unless the columns occur in the picture so near the centre of the visual angle as to make the discrepancy unnoticeable. At the extreme side edges, confusion is rampant between the ellipse and the square in violent perspective. We cannot ask, "Well, what *is* the right form, then?" There is no right form; it is never seen. Plane representation alone *invents* it, and does so very badly.

We know well how the capitals at the edges of a wide-angle photographic view disport themselves. They convince nobody. Why should photographers attempt the impossible? The anomalies are far worse in photography than in graphic art, because not even the conventional ellipses and circle, for circle and sphere respectively, are possible to photography, and no way exists of avoiding the inevitable distortions due to various causes — chiefly that of the flat plate. Spheres

that the photograph represents as ovoids are as ridiculous as circles given as distorted ellipses. They are unknown to visual experience.[1]

Photographers give themselves a lot of needless worry in putting too high a value upon the science of perspective. They regard it as a sort of codex of laws of the Medes and Persians; whereas it is but a mere taking of a line of least resistance. To adjudicate the rights and wrongs of lens-made images by such an admitted convention is to wallow in interminable confusions.

With regard to the question of vanishing verticals to which allusion has been made, the problem may be solved by imagining that a given vertical plane is to be represented, say the side of a large building. Let the spectator's standpoint be equidistant from each of the four corners of it; let the spectator be also the photographer. If strings were stretched from the lens (be it of the eye or the camera) to all parts of the wall, the most directly placed one would be the shortest; those going to the outer points would be the longest. But if these strings, while maintaining their direction, were next all cut to the same length as the centre or direct one, they would terminate at places in space that together would form part of a sphere, where they would all represent the spherical " plane " of vision (to use a contradiction in terms). It is in this spherical plane that objects of the same size appear to be so to the eye. Thus the wall virtually becomes farther from the eye according to the length of the strings, and the bricks in it must necessarily appear smaller as they fall each into its own particular spherical area. The corners of the wall will be the most distant and the smallest parts, which fact entails that the edges of the walls must seem to shrink together towards those parts.

This result is not accepted by art as being a convincing method of representation. Art prefers that lines which are known to be straight

[1] There are, of course, parabolic and hyperbolic curves which represent segments of circles that are large enough to include the spectator's standpoint upon or within them. But such curves do not affect the questions discussed.

shall be shown straight, and it is for this reason that perspective requires that neither horizontal lines nor vertical lines shall either curve or incline when they are parallel with and perpendicular to the base line of the picture.

So far eye and camera are in company, but at the next step they part; for the retina of the eye whereon the image falls is spherical, whilst the photographic plate is, of necessity, flat. If the photographic image fell upon a spherical plate it would still show that the further parts of the wall were the smaller parts in the image, as the eye does; but a further complication arises from the fact that the rays passing through the lens of a camera, and not being met by a spherical surface but by a flat one, seem to recover size for their images; those from the outermost images pass in obliquely and have further to go before they meet the opposite side of the plate. Going further means a spreading or enlarging of the image they carry; and not only that, but also that the image is not cut fair and square by the plate, but in an oblique section which results in a distorted image. Lens makers deal with these distortions, which in a narrow angle of view are seldom noticeable.

Attempts have been made to make a compromise between a flat and a spherical plate in the panoramic camera which uses a cylindrical plate and a lens that revolves. It certainly possesses a roving center of vision, but only on a horizontal line and the results are no better — probably worse than that of the fixed view which does simulate the vision of an instant.

The vanishing lines of our postulated building are not likely to occur in reality because although we may see the ends of a wall half a mile long getting apparently smaller to right and left, we are not likely to see the same thing happen vertically since the walls are not half a mile high. Mountains undoubtedly "vanish" vertically but nobody would detect it without aids in the form of vertical lines running up them.

Vertical lines should converge in photography when the camera has been tilted upwards; for that means that vertical lines are no longer vertical, but *retiring,* judged from the point of view of the lens. If we laid the towers of St. Paul's or York Minster on their backs and photographed them from their bases their lines would quite correctly vanish; but they would then be horizontal not vertical. Correct as this convergence by tilting must be, it is not agreeable in a picture because it makes a building look as though it were falling backwards, and we prefer the well-worn convention of perspective that things vertical should be so represented. If we ourselves go to a tall tower that is of the same width throughout — say the Victoria tower at Westminster — and look up along it from its base, its lines certainly do converge; and they would converge towards the base if photographed from an aeroplane. But artists do not paint this irrefutable truth and wise photographers do not show it if they can avoid doing so, because of further complications. With the flat plate there occurs again that cutting of the cone of rays obliquely — a thing that has been shown not to occur in the eye (with some reservations not needing discussion here). This occasions the over-convergence that a tilted camera entails. It can be neutralised by the device of the " swing-back " which restores the plate to a position in which the cone of rays coming from the object is cut by a plane at right angles to the axis of the cone of rays.

The crux of the matter is: " What are we going to do about it? " The summing-up is that the photographer must not be satisfied unless his pictures *look* right. He must cease attempting to prove that they are " correct " whatever they look like. He must be prepared to sacrifice some of the field allowed him by the plate and be content with one which approximates to the visual field of the moving eye and the fixed head. For architectural work he must keep his camera scrupulously level, or his plate parallel to the plane of the building. He had better favor a long focus lens wherever he can use it; though a wide angle

lens is not likely to bother him much in landscape of the expansive kind, since it will give more " rope " at any time, and there is always the resource of masking negatives to restore a narrower angle.

The portraitist may well lay to heart the licence of photographic perspective in distorting, and in causing disproportion of the facial features.

But these misfortunes can be avoided. There is a more serious characteristic of photography which seems to be inherent and inevitable, and due to the same cause of an increase in the scale of near objects in excess of the increase registered by vision, already discussed.

Although obvious instances of this kind seem seldom to be taken seriously by technicians, it is a very common experience of pictorial photographers to have been in the first place impressed with the grandeur of mountains, the dignity and importance of mid-distant trees, or the dominance of some tower over a cluster of nearer buildings; and then to find in a camera picture of the scene that the mountains are comparatively low and puny; that the noble trees are too small to be imposing; and that the tower does not dominate but has shrunk and sunk down among the chimney pots.

Technicians to whom the matter is mentioned invariably fall back on the never-failing argument of width of angle, saying that with a lens of longer focus the images would be larger. If they are reminded that the length of focus makes not the least difference to the *relative* size of objects in the result they will argue that the complaint has no foundation in fact; that there is no difference between the proportions as given by the photographic lens and the lens of the eye. This is because technicians are usually so absorbed in matters of exposure and development that they do not much notice visually the " points " of the view they are taking, and once having left the spot have no recollection of such points.

The matter was brought forcibly home to me years ago, when

first I took a photograph from the actual spot from which I made a sketch. Recently a better opportunity still has offered itself, the results of which are given here. It is only by making a drawing in a careful manner that the discrepancies appear. Most photographers do not sketch, and the few that do never seem to have done so in this comparative manner. If the reader will turn to the photographs by Mr. Symes and Mr. Gleave (Plates 76 and 77) and then compare them with the reproduction of an unfinished water-colour drawing there given, he will find some surprising differences that will bear out the argument advanced. In the photographs the bridge in the foreground is a far more important and larger affair than it is in my sketch, where it does not stretch right across the composition. Measure it from the little spit of sand beneath the arch to the soffit of the arch immediately above, and then lay that measurement upon the mountains, at the central depression in the sky line. In the photograph this unit of measurement will reach down to a level field just above a belt of trees. Make the same measurements on the sketch, and the height of the archway will be found to go into the same space on the mountains not once, but twice.

It is easy, of course, to say that the drawing is wrong; but the reader must take my word for it that the drawing is right. It was done with care, if not in regard to small detail, at least in proportion, which is the main thing. Confirmation is in the fact that the width of the whole bridge compared with that of the photographs is proportionally smaller with proper consistency. These two photographs were taken with different focal lengths; but their records coincide, of course.

Though it is not easy to find an explanation of the discrepancy of which this is a typical example, yet nothing is easier than to find endless examples of it, if drawings are competently made from exactly the standpoint of photographs. The only theory that I have been able to find by searching books and treatises, which as a rule eschew the human record altogether, is based once more upon the fact of the flat-

plate as opposed to the spherical retina. That fact certainly seems the *fons et origo* of many perspective troubles. The theory is that the direct or axial rays from an image entering the eye and falling upon the curved retina at the central spot are longer than those that fall on the parts nearer the crystalline lens owing to the curvature of the retina. The latter rays being shorter form a smaller image; and come into the eye obliquely from points at the side of the view. But when these same oblique rays fall upon a plate, which is flat and not curved, their images become larger than those of the axial rays because being longer they have farther to go before they are stopped. This is the time-honoured explanation of the enlarging of scale due to a wide angle upon a large plate; but it does not explain the camera's extra reduction of scale in distant things as compared with the eye. The enlarged images complained of are not confined to the sides of the view on the plate. If the bridge in our examples had shown a tall stone cross upon it, rising up in front of the mountains, it would have been *in the middle* of the picture, not at the sides, but would equally have been larger in proportion to the mountains than it would have appeared to the eye. In the same way you may see the clock of a church tower just obscured by a near post; but on photographing it you may find not only the clock but the whole church tower obscured by the post. Binocular vision is no explanation here, since the distance of the objects renders parallax negligible.

When this over-reduction in ratios of distance is comprehended there is no more mystery about the over-violence of perspective in photography; it follows necessarily. It has been used to advantage, commercially, thousands of times to represent buildings as bigger than they really are by the system of violently oblique lines of perspective which the undue enlargement of nearer parts must involve. But the popularity of this abnormality in advertising circles is its own incontestable proof. To claim that it can be cured by a lens of long-focus

is absurd. All that can be done in that way is to avoid the nearer end of it.

There seems to be a far more complex system of deflection of rays in the eye than in even the compound lenses of the camera. It must be borne in mind that not only does the crystalline lens deflect, but the cornea and the aqueous humor do so likewise; and it seems to me that it is here that a cause for apparent anomalies will be found. The airy waving aside of drawings on the ground of inaccuracy or unconscious psychological exaggeration is neither explanation nor argument, as accurate tests will prove to any that care to make them.

The bearing of the matter on picture-making is that pictorial photography suffers considerably from any non-coincidence with vision. We wish to represent something that has moved us when we have seen it. If the representation is not what we have seen it cannot move us.

Every effort to exalt the camera-picture to the plane of graphic art must necessarily be compromised by so basic a difference between the two.

CONTROL IN PRINTING

THERE remains yet a subject of much importance to pictorial photographers upon which something must be said. It is the practice of so making a print that the result will not be necessarily such as a negative would give printed in the usual automatic manner. As everyone knows it is possible and legitimate to vary the result of automatic printing from a negative. This always has been done at the will of the printer within the latitude between extreme under and over printing. But although this is optional, it is not quite what is meant by " control " in the language of photographers. Indeed in the hands of an incompetent such wayward printing would appear to be sometimes quite out of control.

The " perfect negative " enthusiast should if he is consistent exercise no artistic but only a scientific judgment as to the degree of strength his print possessed, and he should scorn to give greater strength to one part than to another. If he really does make modifications the act is either a confession of some imperfection in the negative, or else it is deliberate control in the more recent acceptation of the term.

Except in the case of local development of platinum prints by the use of glycerin, the accepted meaning of the term " control " is reserved for cases where a departure from the strict tale of the negative takes place in the evolution of a picture by the employment of pigment. Thus the processes of platinum-gum, gum-bichromate, oil-printing, and bromoil owe their characteristics to the manipulation of pigment at the discretion of the printer, and not to the chemical formation in the paper of an image — visible or latent until the development.

The printing may be as " straight " in a pigmented print as in one by contact, but whether it be so or not, the pigmented print is always considered as belonging to the controlled class.

In the days of combination printing where any number of negatives were employed there must have been a goodly amount of " faking " to bring harmony into the final achievement. Yet the advocates of straight printing do not seem to look askance on those productions — possibly because, though the image may have been modified as to tone, it was faithful to the negative as to form and definition. The objections to control printing which at one time raged were presumably founded on the notion that it was possible to insert objects of which the negative was innocent. In the first flush of an idea of such power oil-printers certainly did attempt to see how far they could go. I myself did things in this line both with oil and bromoil that were in the nature of *tours de force*. But things have now settled down to much less exhilarating conditions; we respect our negatives as far as we can. But at no time was there any serious inserting of things or of changing from one into another; though personally, I should see nothing wrong in that, provided it could be done well enough to justify the act. It comes to this, that if the photographer is an artist and skilful at manipulation, there is scarcely a limit to what he might do. Unfortunately such people are few, though many have ambition to do the artistic thing. Ambition is an excellent quality when it does not master the self-criticism of a healthy expert. There have been wondrous attempts, for example, to make coloured gum-prints and coloured bromoils. It does not appear that such things can even get within nodding distance of engravings printed in colour; which themselves are poor things enough, and entirely wrong in principle.

The ethics of the matter must be summed up in the question whether the photographer is really and urgently in need of a modification of what the negative offers. That depends entirely upon his

knowledge of art and of nature. But admitting that he is dissatisfied with a straight print because it does not give him the true spirit and charm of the subject; he then has to weigh the chances of betterment if he resorts to pigmenting.

Mr. Fred Judge has deduced from a calculation of exhibition catalogue figures, that it is the good pictorialists who use the pigmenting processes most. In a lecture at the Royal Photographic Society he summarised the claims of the pigment methods of oil and bromoil in these headings: the choice of any colour; the choice of almost any base (in some of the methods); the permanence of the results; the power of control; the creation of something; the personal pride in such; the fascination, inducing the best work; the distinction of results; the ultimate intrinsic value. Nine characteristics, all of which he substantiated by sound arguments. His word carries weight, because not only has he never been beaten as a producer of excellent transfer prints, but he is a photographer of long and varied experience in technical and commercial directions, and a painter to boot. Pigmenting has another characteristic which Mr. Judge forgot to mention: it is capable of infinite variety in the print-texture — its quality — according to individual methods. A great number of prints in this book are from pigmented originals, some not being distinguishable from straight prints in their smoothness and sharpness. Between this and the opposite extreme there is every grade of quality up to the granulation in works like V. Kammerer's "Venice" (Plate 39), "Hochland" (Plate 52) by A. Niklitschek, and "King Ida's Castle" (Plate 78) by J. H. Leighton.

To my mind the outstanding advantage of the pigmented print is the ease with which its tone values can be adjusted to the truthful effect which inspired the photographer. I am a sincere disbeliever in the truth of photography in all but a few aspects. The preceding chapters will leave the reader in no doubt on that point. But I have no ground for believing that fine pictures cannot be made by means of the

camera. Perspective faults are, of course, hopeless; but they are easily avoided. Tonal faults only exist for the observant and fastidious; but they have now lost their sting, because it happens that those persons who are most hurt by them are precisely the persons who can cure them.

Next in importance to bringing tone values into proper relationship comes the inestimable advantage of being able to sharpen or emphasise an accent. This is a vastly superior resource to differential focussing, in which one can only deal with a whole vertical plane at a time. By a touch of the brush one may diffuse or define; soften or sharpen; lighten or darken, any spot in any surroundings. Nothing like this amount of elasticity exists in gum-bichromate printing.

In view of the many excellent books and published articles upon the pigment methods it is quite unnecessary to go into ways and means in these pages, especially as technicalities of manipulation are outside the scope of this book. I may, however, profitably refer to some of the principles of the processes.

Pigmenting of the controllable kind first became popular with the gum-bichromate process, in which a mixture of potassium bichromate with gum-arabic and a pigment is coated upon the paper to be printed. The image is developed by floating the paper face downwards in water, or by spraying, or by brushing to remove the gum that remains soluble after the action of light upon the mixture. Each of these methods is dependent upon the depth of the printing. By multiple printing great length of scale can be gained in the dark tones. The process is therefore, within certain limits, capable of much variation of tone.

The gum-platinum process permits of the delicate gradations of platinum printing whilst the darker parts of the picture are reinforced by the bichromated gum and pigment.

In the oil-print, a paper is coated with bichromated gelatine and printed by contact. After washing to remove the yellow stain of the bichromate of potash the print is soaked in tepid water until the gela-

tine has absorbed moisture enough to make it resist a greasy ink. This ink is applied with a brush and adheres to the parts that have been hardened or " tanned " by the action of the light through the negative. Oil-prints are sturdy things and lend themselves well to patient manipulation, with beautiful effects of delicacy and strength.

A similar method of pigmenting produces the image in the bromoil process, which has far outdone the oil-print in popularity because it is worked upon a bleached bromide print and therefore can be produced in any available size without the necessity of a large negative. Mr. Fred Judge and Mr. Bertram Cox have, in collaboration with me, written concise treatises [1] upon these methods, giving not only the usual instructions but the whys and wherefores of the variations in result. Dr. Emil Mayer has also treated the subject at length in " Bromoil Printing and Bromoil Transfer." [2]

There is a quicker response and a more amenable temper in oil and bromoil than in any other pigment process. They approach more nearly to the creative class of work because every scrap of the picture is called into being by the photographer's personal manipulation. There is no leaving it, watch in hand, to do itself; it has to be done by the printer who therefore controls it, in effect, from first to last. He watches his every stroke and finds absorbing fascination in so doing. And when it is done, if it is well done, he has that justifiable pride in it to which Mr. Judge alludes.

Should he then transfer his picture to another paper, by contact in an etching press, he achieves still another quality, quite impossible to obtain by any other printing method known to photographers. The result has nothing in its substance that is specifically photographic, for it is paper and printing-ink absolutely. Its image alone is photographic

[1] " Oil, Bromoil and Transfer " by Fred Judge and F. C. Tilney, " The Art of Pigmenting " by Bertram Cox and F. C. Tilney. Published by Henry Greenwood & Co., London, in the series " Tracts for Pictorial Photographers ", 1s.

[2] Published by American Photographic Publishing Co., Boston, Mass.

in origin. Such a print free from emulsion, gelatine, gold, platinum, silver, or any so-called "chemical," will last until the paper rots and the ink fades, which is practically never.

It is not easy to conceive of any process that would more completely answer the requirements of a work of art. Given a good subject pictorially attractive, rendered with artistic feeling and conveying the mood of the moment of inspiration, what can there be less admirable, and less worthy in such a print than in any production of monochromatic graphic art?

If photographers are really concerned that their art should take a place among the other arts, they will think of the end in view more than of the creditable performance of the mere means. There is really very little credit in turning out a perfect *photograph,* in these days; but there is as much credit as ever there was in producing a fine picture: one that only the photographer himself could produce as an interpretation of some rare moment in nature fortunately seen. The end of art is this and nothing else. It is not the recording. It is interpreting through the medium of the artist's vision and temperament. This is the true Newton idea to which allusion was made at the commencement of this book. Let photographers cultivate their sensitiveness and responsiveness to messages of nature and learn to enjoy her moods. "Patterns" and pots are childishness. The best of our workers are those who whilst seizing on form can at the same time divine its content. In the pictures here shown by Fred Judge (Plate 73), Herbert Bairstow (Plate 61), Bertram Cox (Plate 79), and J. Harold Leighton (Plate 78), as well as of many others given throughout these pages, it will be seen that their charm lies in something distinctive: in a captured mood.

All but the last of these four pictures are by the pigmenting process transferred. I never saw a mood so truly and beautifully given by a sky in any straight photographic print as in Mr. Judge's "Sunset, Jersey." Beautiful in quite another mood, Mr. Bairstow's "Willows" exhibits

the very spirit of pastoral and sylvan loveliness. Different again is Mr. Leighton's mood of grim romance in the choice little " King Ida's Castle." This is by the gum-bichromate process, in which Mr. Leighton has worked with faithful consistency, developing a style of strong and simple statement in the spirit of the engraver's and etcher's art. The peculiar fascination of this style is due directly to the method of interpretation, unimaginable in any process other than one where pigment takes the place of chemical stain.

Mr. Cox's " Buoys at Lynmouth " is not exactly typical of the class of work he usually affects, which is landscape of the purest kind. Here he may be said to have made an outdoor still-life study. But it is easy to see that a landscape effect inspired him; for the subject-matter is less one of the objects themselves than of the play of light and shade upon them, and their great mass opposed to the small-scale of the distance. To have seen and rendered the beauty and impressiveness that such cumbersome trifles can possess argues the right pictorial spirit.

We make pictures to give pleasure and there can be no pleasure in pictures without elemental ideas. Admirable technique of itself is of little importance to the spectator, for he is only delighted when he is moved or touched. The ideas which move him are those that arose first in the photographer's mind; and they must be handed on. They cannot be handed on in a literal transcript of the form alone. It is the content that conveys them.

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